



### 1982-1983 Nationwide Recreation Survey











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### 1982-1983 Nationwide Recreation Survey

Issued April 1986



**U.S. Department** of the Interior Donald P. Hodel,

Secretary

**NATIONAL PARK** SERVICE William P. Mott, Director

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### 1982-1983 Nationwide Recreation Survey

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The 1982-83 Nationwide Recreation Survey Report was prepared by the Recreation Resources Assistance Division, National Park Service, U.S. Department of the Interior, Washington, D.C. The authors are Merle J. Van Horne, Laura B. Szwak, and Sharon A. Randall, with substantial support from Carolyn B. McKenna. Design, graphics, publication, and printing services were provided by the Publication Services Division, Bureau of the Census, U.S. Department of Commerce.

#### **Foreword**

The 1982-83 Nationwide Recreation Survey (NRS) is the latest in an irregular series of interview surveys of the American public dating back to the 1960 National Recreation Survey sponsored by the Outdoor Recreation Resources Review Commission. Like the earlier efforts, this survey provides current information on what Americans do for recreation in the outdoors and on their perceptions and aspirations with respect to recreation opportunities.

This most recent NRS was sponsored by the Interior Department's National Park Service in cooperation with the Forest Service (Department of Agriculture), the Bureau of Land Management (Department of the Interior) and the Administration on Aging (Department of Health and Human Services). This is the first time that a nationwide recreation survey has been conducted cooperatively by a consortium of agencies. This shared effort resulted in a much larger, better, and more comprehensive outdoor recreation data base than any of the sponsors could have acquired alone in the constrained budgetary climate of the 1980's. The sponsoring agencies have earned our thanks for their cooperation, perseverance, and spirit of accommodation.

The computer tape of the 1982-83 NRS data base, with documentation, is available for purchase, and scientists of different disciplinary viewpoints are encouraged to acquire and analyze it. For further information on the NRS data base, contact the Recreation Resources Assistance Division, National Park Service, at 202/343-3780.

Future recreation surveys are in various stages of planning. So that we may serve your information requirements better, we need your comments and suggestions. A response form is provided at the end of this report for your convenience in evaluating the 1982-83 NRS and suggesting improvements in our data collection efforts. I can assure you that your advice will be given the most careful consideration in planning future recreation surveys.

Finally, on behalf of all concerned, I would like to direct a heartfelt word of thanks to the 5,757 Americans who generously consented to be interviewed during the 1982-83 Nationwide Recreation Survey.

William Penn Mott, Jr.

Director, National Park Service



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#### Introduction

An understanding of the outdoor recreation participation patterns and preferences of the American people is necessary for effective policy development, planning, and decisionmaking at all levels of government and in the private sector. To enhance this understanding, the Federal Government periodically conducts nationwide recreation surveys. The results of the most recent Nationwide Recreation Survey (NRS) conducted between September 1982 and June 1983, are presented in this report.

The data collected include:

- 1. Participation rates and volume of activity for selected outdoor recreation pursuits.
- Favorite activities, reasons why people like them, and constraints on participation.
- Activities recently started or dropped and prospective new starts.
- Travel, in miles and time, as it relates to selected activities and types of destination.
- Utilization and importance of outdoor recreation opportunities at varying distances from home.
- 6. National parks ever visited.
- Public opinion on national park fees and on methods of rationing national park visits.
- Recent and prospective changes in people's allocation of time and money to outdoor recreation and related travel and purchases.
- Selected aspects of involvement in outdoor recreation by persons aged 60 and over.
- Socioeconomic characteristics of respondents as they relate to each of the foregoing information categories.

#### HISTORIC BACKGROUND

At least 22 nationwide questionnaire surveys of outdoor recreation have been conducted between 1959 and 1978, and several more have occurred since then. Five of these surveys may be regarded as direct antecedents of the present effort.

The earliest of these, the 1960 National Recreation Survey, was a four-season survey sponsored by the Outdoor Recreation Resources Review Commission (ORRRC) and conducted, under contract, by the Bureau of the Census in the U.S. Department of Commerce.<sup>3</sup> The remaining four (1965, 1970, 1972, and 1977) were all sponsored by the Bureau of Outdoor Recreation (BOR), in the Department of the Interior and its successor, the Heritage Conservation and Recreation Service (HCRS). They were conducted as part of the nation-wide outdoor recreation planning process established in response to the findings of ORRRC.

The 1965 National Recreation Survey was patterned after the ORRRC survey and was also conducted by the Census Bureau. It was, however, restricted to post-summer (September) interviews. The 1970 survey was a short mail supplement to that year's

<sup>1</sup>Bevins, M.I., and D.P. Wilcox. 1980. Outdoor

Recreation Participation-Analysis of National Surveys,

1959-1978. Vermont Agricultural Experiment Station

Fishing and Hunting Survey sponsored by the Bureau of Sport Fisheries and Wildlife (since renamed the Fish and Wildlife Service) in the Department of the Interior. The 1972 survey was conducted for BOR by Audits and Surveys, Inc., as part of the data gathering effort for the 1973 Nationwide Outdoor Recreation Plan. The 1977 Nationwide Recreation Survey was a telephone survey conducted by Opinion Research Corporation for HCRS. It was a major source of data for the third Nationwide Outdoor Recreation Plan published in 1979.

Differences of content, wording, and methodology make it difficult—and somewhat hazardous—to compare the results of the present survey to its antecedents of 1970, 1972, or 1977. Comparisons will be made, where possible, to the 1960 and 1965 National Recreation Surveys, which were used as a pattern for certain basic elements of the 1982-83 survey. Additionally, these three surveys share the following characteristics:

- In-the-home, personal interviews were conducted where possible—with telephone followups where the selected respondent was otherwise unavailable.
- 2. The eligible population was the United States noninstitutionalized population aged 12 years and older.
- The survey was conducted by the Census Bureau in accordance with its exacting standards and procedures.

Bulletin 686. Burlington, VT.

The first four of these surveys, conducted in 1960, 1965, 1970, and 1972, resulted in one or more final reports which have since become difficult to find, even in major libraries. Fortunately, all of them (plus a less directly relevant survey conducted in 1971) are described and evaluated in Kirchner Associates. Inc.

Recreation Surveys, which is Survey Technical Report 1, in Appendix II of The Third Nationwide Outdoor Recreation Plan. 1979. U.S. Department of the Interior, Heritage Conservation and Recreation Service, Washington, D.C. The most recent antecedent is the 1977 Nationwide Recreation Survey, which is described in appendix I, Survey Summary and appendix II, Survey Technical Reports, of The Third Nationwide Outdoor Recreation Plan.

Evaluation of Five Previous Nationwide Outdoor

<sup>3</sup>An earlier, limited purpose survey, the 1955 Survey of the Public Concerning the National Parks, will be referred to in Chapter 4, Americans and Their National Parks.

### 1982-83 SURVEY – A PARTNERSHIP EFFORT

By mid-1981, the BOR and the HCRS had been abolished. Hence the task of organizing and coordinating this survey fell to the successor agency, the National Park Service. During the summer of that year, a consortium of four agencies was formed to conduct the survey—the National Park

Service and the Bureau of Land Management (BLM) in the Department of the Interior, the Forest Service in the Department of Agriculture, and the Administration on Aging in the Department of Health and Human Services. Each contributed to the design and financing of the survey and sponsored certain of the questions.

The Forest Service and the Bureau of Land Management jointly sponsored a series of questions about the nature of trips and environments associated with selected outdoor pursuits of concern to wildland managers. (See Appendix C, Survey Questionnaire.) The Administration on Aging sponsored a set of questions which was targeted to aging issues and was asked only of respondents 60 years old or older. The remainder of the survey was sponsored by various elements within the National Park Service.

On September 30, 1981, the prime contract for the conduct of the 1982-83 NRS was let to the Survey Research Center of the University of Maryland. The Center, in turn, subcontracted the conduct of the interviews and the keying of the data to the Bureau of the Census.

#### **PROCEDURES**

The following is a brief summary of the way the survey was developed, conducted, and analyzed. A detailed Methodological Report has been prepared and is furnished to researchers and others who purchase the NRS data tape.

The 1982-83 NRS was conducted as a supplement to an ongoing household sample survey, (The National Crime Survey). This arrangement resulted in substantial cost-savings and reduced respondent burden, since interviewer travel costs were borne by the basic survey and the necessary socioeconomic data about each respondent were collected as part of the basic survey (hence the lack of any demographic questions in the NRS questionnaire—see appendix C).

The 1982-83 NRS instrument was developed cooperatively by the agencies participating in the survey. The final development and refinement of the instrument were done by the University of Maryland's Survey Research Center and the U.S. Bureau of the Census in consultation with the cooperating agencies.

The instrument, instructions, and ancillary materials were pretested in June 1982.

Interviewing took place during September 1982, and in January, April, and June 1983. Since these may be regarded as, respectively, the post-summer, post-fall, post-winter, and post-spring months, a seasonally balanced sample was achieved. This is a major advantage in a survey of outdoor recreation, a phenomenon which varies so greatly from season to season. From 1,397 to 1,466 completed interviews were obtained in each of those 4 months, for a total sample of 5,757.

During the four survey months, the Census Bureau assigned its interviewers 6,720 NRS cases. These were pre-identified individuals in crime survey households-no more than one per household. Crime survey interviews had been conducted previously in these households as many as six times, at intervals of 6 months. After the National Crime Survey's final or exit interview, the selected individual was asked to participate in the Nationwide Recreation Survey. Of the 6,720 assigned cases, 5,757 (about 85 percent) resulted in completed interviews, 315 (5 percent) refused to participate, and 648 (10 percent) were unavailable or were not interviewed for a variety of reasons.

Of the 5,757 completed interviews, most (81 percent) were conducted in the respondent's home at the time of the final Crime Survey visit. If the pre-identified individual was unavailable at that time, the interviewer left an Information Card Booklet<sup>5</sup> and arranged to conduct the interview by telephone at a later time. Fourteen percent of the completed interviews were conducted in this manner. In the remaining 5 percent of the successfully completed cases, the Information Card Booklet could not be found at the time the interviewer phoned. In that event, an alternative (long form) questionnaire was used, in which the activity list, national park list, and other multiple-choice responses were read to the respondent instead of by the respondent.

As are all sampling surveys, the current NRS is subject to numerous sources of error—most of unknown magnitude but hopefully small.<sup>6</sup> By contrast, the magnitude of sampling error—the difference between a number derived from a sample and the corresponding (true but unknown) quantity in the sampled population—can be estimated.

Appendix B examines sampling error as if affects the reliability of the NRS.

#### CAUSE AND EFFECT— A WORD OF CAUTION

In general, this report presents the results of the 1982-83 NRS in a descriptive, rather than an analytical, manner. In chapter 2, for instance, changes in the status of certain activities between 1960 and 1982-83 are described with no attempt to suggest reasons or causes for those changes. Other investigators are already analyzing these underlying cause-and-effect relationships, and more such analyses are expected in the future.

In certain instances, where the data may be easily misunderstoood, alternative interpretations are offered as a warning against facile conclusions.

#### ORDER OF PRESENTATION

The results of the 1982-83 NRS are presented in this report, generally, in a sequence corresponding to that of the questions in the questionnaire. Certain cross-comparisons are made and, in those cases, information will necessarily be presented out of questionnaire sequence.

This approach will help those readers who wish to refer to the questionnaire (appendix C) periodically to increase their understanding of what the data mean. The question sequence is, moreover, an essential element of the survey method. Each question, or series of questions, instills in the respondents certain expectations, definitions, and mind sets which will influence their interpretation of the following questions. For example, the questions on activities particularly enjoyed were deliberately placed first on the questionnaire to ensure that the spectrum of activities considered by the respondents would be determined by their own definition of outdoor recreation. After reading the activity list (in the 2-Series of questions), the respondent's definition of outdoor recreation is strongly conditioned by that list throughout the rest of the interview. By contrast, the questions on national park fees and policies were placed after the list of national parks, since the sponsors of those questions wanted responses based on their definition, rather than the respondent's definition, of what a national park is.

Chapters 1 and 2 address the various recreation activities from the viewpoints of participation, constraints, choices of favorites, and the reasons for those choices—as well as certain aspects of starting new activities and quitting old ones. This information was derived from the 1-Series and the 2-Series of questions (question 1.a, 1.b, etc. See appendix C). Chapter 1 is about the outdoor recreation involvements of different kinds of people. Chapter 2 examines each listed ac-

<sup>\*</sup>Robinson, John P., and Cindy Kahn. 1984. The 1982-83 Nationwide Recreation Survey: A Methodological Report. Prepared by Survey Research Center, University of Maryland, for the National Park Service, U.S. Department of the Interior, Washington, D.C.

Others may purchase the Methodological Report as a separate item. Information may be obtained from the Recreation Resources Assistance Division, National Park Service, USDI, P.O. Box 37127, Washington, DC. 20013-7127. Telephone 202/343-3780.

<sup>&</sup>lt;sup>5</sup>The Information Card Booklet, often called a "flashcard booklet" was used by the respondent as an aid in answering certain questions designed to elicit reactions to a limited or structured array of choices. The booklet is described and illustrated in the Methodological Report.

<sup>&</sup>lt;sup>6</sup>Examples are nonresponse error (compensated, in part, by a weighting procedure described in the Methodological Report), recall error, and those interviewer and data processing errors which remain undetected after editing.

tivity in terms of the numbers and kinds of people who participated in it or chose it as a favorite. Chapter 3 examines selected spatial aspects of outdoor recreation—certain kinds of trips, and the importance and utilization of recreation resources at different distances from home. The data underlying these results were derived from the 3-series and 4-series of questions. Chapter 4 reports the results of the 5-series of questions which addressed the respondent's past experience of national park visits, willingness to pay for future visits, and opinions on certain national park policy issues. Chapter 5, based on the 6-series of questions, examines recent and prospective changes in people's

allocations of time and money to outdoor recreation. Finally, chapter 6 addresses the data derived from the 7-Series of questions, which are about aging and outdoor recreation. These questions were asked only of those respondents 60 years old or older.



#### **Summary of Findings**

Of the 36 outdoor activities listed in the survey, the respondents participated in an average of 7.2. By their own estimates, they averaged 37 activity-days of the listed activities during the 12 months prior to the interview and spent about \$355 on outdoor recreation during that period. Figures 1 through 7 illustrate how involvement in outdoor recreation (activities, days, and dollars) differs among various segments of the respondent sample.

### AMERICANS AND THE OUTDOORS

As in past surveys, young Americans are the group most heavily involved in outdoor recreation. None of the identified respondent groupings exceeded the young—aged 12 through 24—in number of activities pursued nor in activity-days of participation. Both of these indicators of recreation involvement decline steadily throughout adulthood to a minimum in the aged 60-and-over group. The reverse is true of the respondents' estimate of money spent on outdoor recreation, which rises sharply through young adulthood and then stays in the \$400-to-\$500 range even with the decline in activity in later life.

The outdoor recreation patterns of the two sexes are remarkably similar, although there are a few activities for which this does not hold. As figure 2 illustrates, however, there are substantial differences between the sexes in the average amounts of time committed to outdoor pursuits.

Racial differences in free time outdoor activity are shown in figure 3. Some of the disparity between average White and non-White participation may be related to income and other factors.

As in past surveys, all measures of outdoor recreation participation rise with increasing family income and added years of education (figures 4 and 5). The effect of income does not become substantial until an annual level of about \$15,000 is reached.

Figure 6 illustrates the association between outdoor recreation involvement and car ownership. The non-car-owning segment was one on the least active groups in the survey.

The size of the locality where a respondent lived (figure 7) bore little relation to outdoor involvement, except that a notable decline occurred in the largest cities—those of more than a million people.

Eleven percent of the survey respondents said they did nothing at all for outdoor recreation during the 12 months prior to the interview. These nonparticipants were concentrated in the aging, non-White, and non-car-owning segments of the sample—and among those with less than a high school education.

#### **ACTIVITIES**

None of the 36 activities listed in the NRS appear to have declined in absolute numbers of participants since the 1960's. Most have grown moderately both in numbers and in the percentage of the respondents who say they participate.

Hunting, horseback riding, and ice skating have maintained a limited following (under 15 percent) or even declined slightly in relative terms since the 1960 and 1965 surveys. Activities which were already mass pursuits—done by about half the respondents—in the 1960's have retained that status. They include swimming, picnicking, walking for pleasure, and driving for pleasure. Among the sports with stable clienteles, fishing and boating were intermediate in popularity between the limited and mass categories.

Four activities—bicycling, camping, jogging, and tennis—have risen from limited popularity (less than 10 percent) to the status of major pursuits over the past two decades. Canoeing and snow skiing have emerged rapidly from a very small base, but

are still limited in the percentage of 1982-83 respondents who participated.

### PLACES AND TRIPS FOR OUTDOOR RECREATION

Most respondents had access to both yards and neighborhood parks for close-to-home recreation. They used nearby recreation areas more frequently than those farther away, but most took at least one trip to an outdoor recreation area more than an hour's travel from home during the 12 months prior to the interview.

Participants in certain activities were queried about the details of trips they took to engage in those pursuits. Trips to go freshwater fishing, small game/waterfowl hunting, and off-road vehicle driving averaged about 100 miles one way. The average distance traveled to go hiking/backpacking, or to go campground camping was over 200 miles. Canoeing trips were intermediate at 150 miles from home, on the average. Hunters, hikers/backpackers, and off-road drivers had the greatest tendency to penetrate roadless backcountry and to encounter few people.

### AMERICANS AND THEIR NATIONAL PARKS

Of the respondents aged 21 and older, 53 percent could recall at least one visit to a national park. In a 1955 survey, 37 percent could recall such a visit. Disproportionate numbers of nonvisitors were found among respondents who were low income, Black, from a large family, non-car-owning, resident in a big city, or low in educational attainment.

Respondents aged 16 and older were asked for their opinions on certain national park policy matters. There was widespread support for the view that the operating costs of national parks should be shared between the general public (through taxes) and the

visitors (through entrance and user fees). In the case of special visitor services, such as campgrounds and bus rides, there was a tendency to favor charging the users rather than the taxpayers.

Support was also widespread for rationing access to national parks when necessary to prevent overcrowding. Most respondents preferred reservation systems over alternative rationing methods.

### TRENDS IN TIME AND MONEY EXPENDITURES

As in past surveys, the most frequently cited constraint on outdoor recreation participation was lack of time, followed by lack of money. Respondents aged 16 and older were asked about changes in their allocations of time and money to outdoor recreation over the prior 2 years, and about any anticipated changes in the next 2 years (figures 9 and 14). About half cited no change, past or future. Of those whose time allocations had changed, the number who cited a decrease in time spent was almost double the number of those who claimed to be spending more time on outdoor pursuits. By contrast, about four times as many respondents anticipated a rise as expected a decline in time spent over the next 2 years. Relatively few respondents cited a reduction in dollar expenditures for outdoor recreation for the past or anticipated a reduction for the future.

The most common reasons cited for changes in time spent in outdoor pursuits were related to the changing stages of the life cycle. Next to old age, the most constraining life condition seems to be the early child-rearing years. This is followed by a rapid increase as the children become older.

### AGING AND OUTDOOR RECREATION

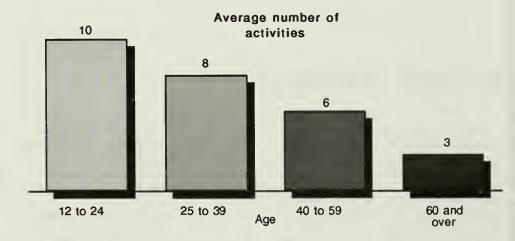
Despite modest increases in participation since 1960, respondents aged 60 and older were much less active in outdoor recreation than younger persons. Almost a third of the older group said they did nothing at all for outdoor recreation in the 12 months prior to the interview, compared with 7 percent of those individuals aged 12 through 59. As measured by average number of activities pursued and number of activity-days, older respondents were about one-third to onefourth as active as the rest. Given this low level of activity, the average estimated annual expenditure for outdoor recreation by senior citizens was quite high (\$391)higher; in fact, than that of the younger segment (\$350).

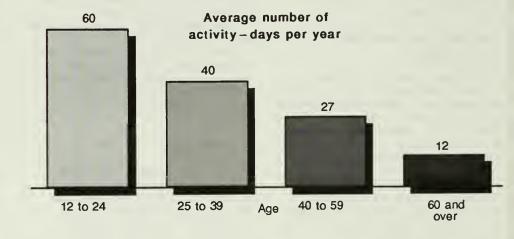
Senior citizens' reasons for enjoying their favorite activities were quite similar to the other respondents' reasons. Seniors were much more likely to cite health problems as a constraint on their favorite pursuits or as a reason for discontinuing a recreation activity.

Only 13 percent of the respondents 60 years and older reported participating in any club- or organization-sponsored outdoor recreation activities. Senior citizen groups and church organizations appeared to be the primary sponsors of these club activities.

Older respondents who were skilled in fishing, hunting, golf, gardening, or team sports, tended to be active in teaching those skills to others. The role of senior citizens in teaching other outdoor skills appears to be very limited.

FIGURE 1
Involvement in Outdoor Recreation, by Age





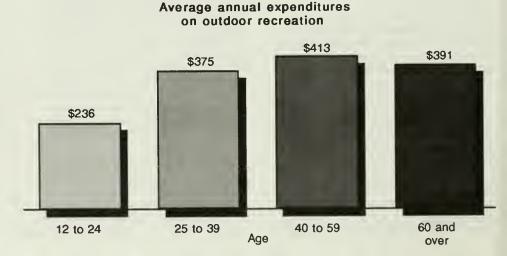


FIGURE 2
Involvement in Outdoor
Recreation, by Sex

Average number of activities

8
7

Male Female

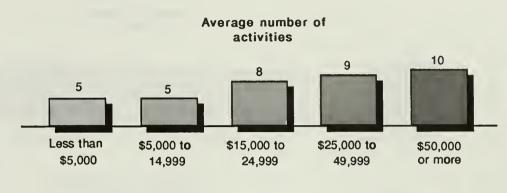
Average number of activity – days per year

44

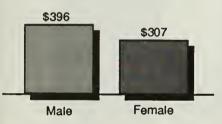
30

Male Female

FIGURE 4
Involvement in Outdoor Recreation, by
Family Income



Average annual expenditures on outdoor recreation



Average number of activity – days per year

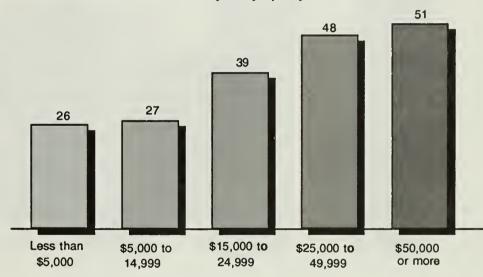
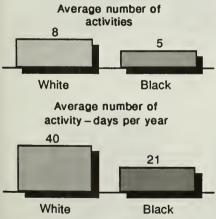
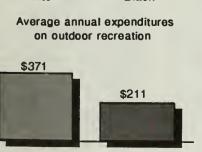


FIGURE 3 Involvement in Outdoor Recreation, by Race





Black

White

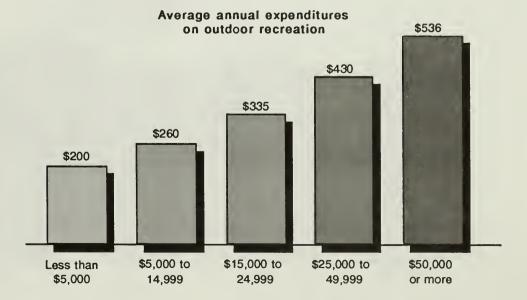


FIGURE 5
Involvement in Outdoor Recreation, by Education

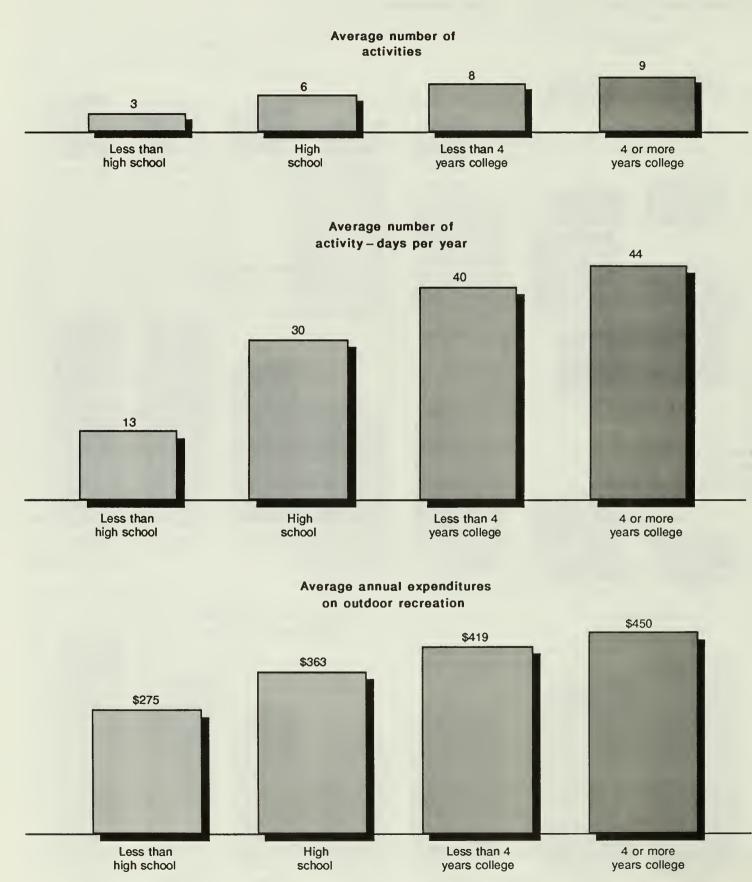
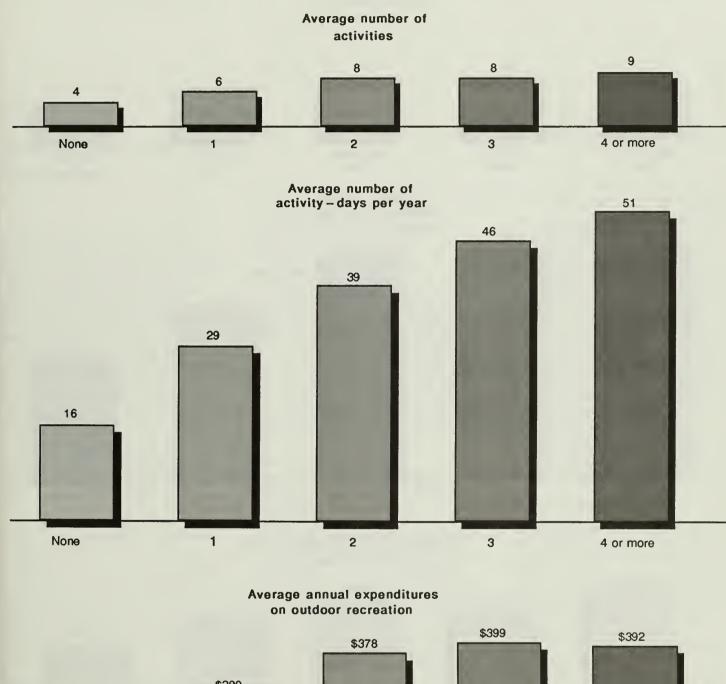


FIGURE 6
Involvement in Outdoor Recreation, by Number of Cars Owned by Household



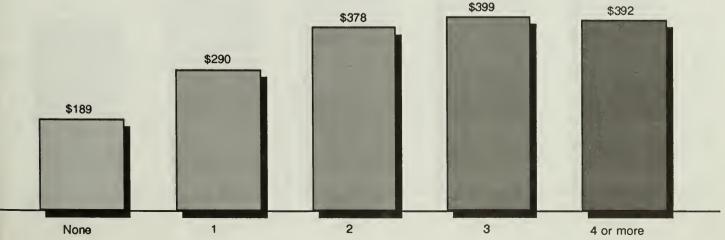
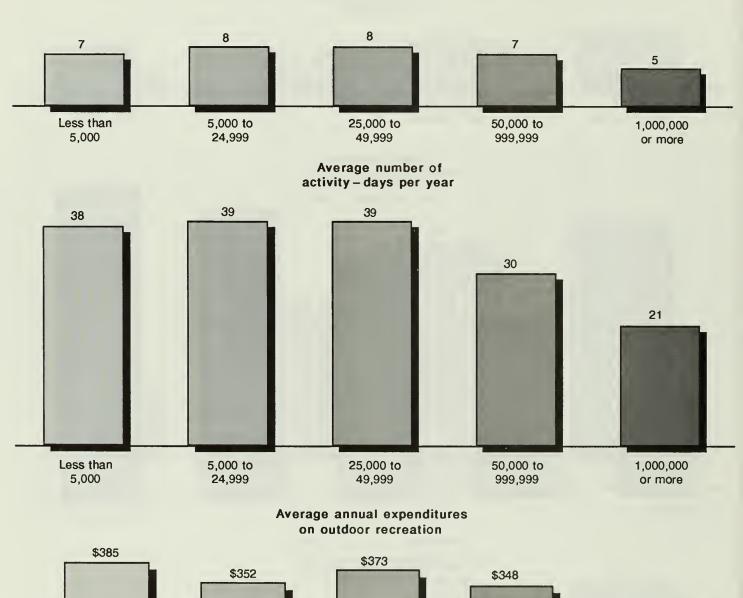
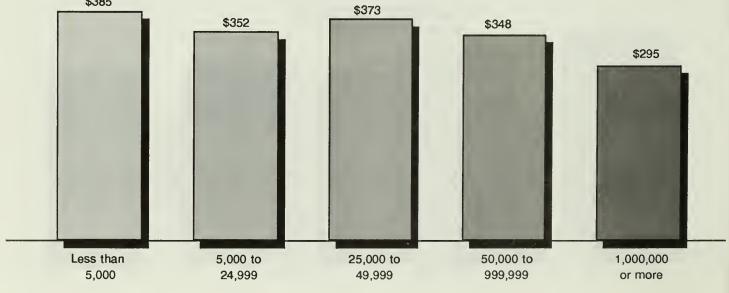


FIGURE 7
Involvement in Outdoor Recreation, by Size of Locality of Residence (Population)

### Average number of activities





CHAPTER 1

### Americans and the Outdoors

As in previous nationwide recreation surveys, respondents were given a list of outdoor recreation activities and asked to identify the ones in which they had engaged one or more times during the previous 12 months. Participation during the 3 months immediately prior to the survey was also ascertained. Before examining the list, the respondents were asked to name any outdoor activities (up to a limit of three) which they particularly enjoyed. Those who named one or more such activities were invited to select, from further listings. anv applicable reasons for liking those activities and/or constraints upon their favored pursuits.

Analysis of the resulting data yields certain measures or indicators of the breadth and depth of involvement with outdoor recreation exhibited by the United States population and its various segments. Table 1 lists two such indicators of breadth, two of depth, and three of change. What do these indicators tell about people's involvement in outdoor pursuits?

Respondents participated in an average of 7.2 of the 36 outdoor activities listed in the survey. They cited an average of 1.7 pursuits as particularly enjoyed and logged an estimated 37 activity days¹ of the listed activities during the 12 months prior to the interview—for all of which they spent about \$355 each.

### INDICATORS OF OUTDOOR RECREATION INVOLVEMENT

Seven measures or indicators are presented in table 1 and described here. They will be utilized in the next section to examine the similarities and differences in

<sup>1</sup>Much less than 37 calendar days. An \*activity-day' was counted for each different calendar day on which the respondent engaged in a given activity, even if for a very short time.

the outdoor recreation involvements of Americans of various backgrounds.

#### **Breadth Indicators**

The first two columns in table 1 are indicators of the breadth of an individual's (or a grouping of individuals') involvement in outdoor recreation pursuits. The first column lists the average number of outdoor activities (from the 36 listed in the questionnaire) which the respondent claimed to have done once or more in the previous 12 months. The second column is the average number of activities (a maximum of three) cited by the respondent as "particularly enjoyed."

#### **Depth Indicators**

For 22 of the 36 activities listed on the NRS questionnaire, participants (respondents who said they did the activity once or more in the prior 12 months) were asked to give three additional items of information. They were asked to estimate the number of different days on which they did the activity during the prior 3 months and during the prior 12 months, and their age when they started participating in the activity. From this information, one of the indicators of depth (and one of change) were derived.

The last two columns of table 1 are indicators of activity depth or of the commitment of the respondent's personal resources of time and money to outdoor recreation pursuits. The sixth column lists "activity-days," an indicator of time commitment derived from the respondent's estimates of the number of different days on which they did each activity during the previous 12 months—summed over all activities in which they engaged.<sup>2</sup>

 $^2$ A conservative estimate based on the midpoints of the first three ranges from which the respondent chose an estimate (A = 1-2 days, B = 3-10 days, C = 11-25 days) and the low point of the highest range (D = more than 25 days).

The result is an indicator of time commitment which is useful in drawing comparisons among activities and between population segments. It should not be interpreted as the number of full days committed to outdoor recreation, nor even as the number of calendar days on which any recreation took place. An activity-day was generated for any calendar day on which the respondent did the activity, even if for a very short time. Moreover, more than one activity-day could be generated per calendar day-one for each activity engaged in on that day. Very likely, the average American commits much less than 37 full calendar days to outdoor recreation annually.

The final column is the respondents' estimate of their annual (prior 12 months) dollar expenditure on outdoor recreation as defined in the survey.<sup>3</sup>

#### **Change Indicators**

To permit the estimation of short-run trends, respondents were asked to name any outdoor recreation activities they had stopped doing in the 2 years prior to the interview, and any they anticipated starting in the next 2 years. These items were used, along with the respondent's age at the time they started the activity, to generate the three indicators of short-run change presented in the third, fourth, and fifth columns of table 1.

Activities recently started by respondents were identified by subtracting their age when they began the activity from their age at the time of the interview. If the difference was two or less, the person was counted as having started the activity in the prior 2 years. The figures in the third column are the averages of the number of such recently started activities for each respondent.

<sup>&</sup>lt;sup>3</sup>Outdoor recreation" was implicitly defined by exposing the respondent to the activity list, various arrays of outdoor locales, etc. See questionnaire.

The numbers of activities which respondents said they had stopped in the prior 2 years or expected to start in the next 2 years were used to derive the averages in the fourth and fifth columns of the table. Although the interviewer asked for anticipated new activities which the respondent had never done before, many persons cited activities which they said they had stopped earlier. Since such instances bear little relation to trends, they were dropped from the data—for both stopping and expecting to start—before the averages were derived.

The seven outdoor recreation indicators or yardsticks in table 1 will now be applied to selected categories of the United States population.

### THE VARIETY OF AMERICANS AND THEIR RECREATION INVOLVEMENTS

In table 1, the NRS respondents are divided into numerous categories based on 14 criteria or demographic characteristicssex, age, etc. This information about each respondent was derived from the National Crime Survey interviews (as many as seven) which were conducted during the 3 years preceding the NRS interview. Therefore, no demographic questions will be found in the NRS questionnaire in appendix C of this report. The recreation involvements of these population segments will now be examined on the basis of the seven indicators listed in the table, supplemented by information derived from succeeding tables, especially table 4 which contains the activity participa-

Caution should be exercised in inferring causality from the associations between population characteristics and patterns of recreation involvement. Even the associations which are evident in the table may reflect, in part, more deeply underlying factors. For instance, widowed, divorced, or separated status is associated with a more drastic reduction in recreation involvement than would be expected from the loss of a spouse. Widows and widowers are, however, generally in the older age categories associated with greatly reduced outdoor activity. Also, divorce and separation are often associated with single parenting—a further constraint on free time pursuits. More such instances will be pointed out throughout this report.

Four of the 14 demographic characteristics examined here—place of residence (SMSA), household members under 12, occupation, and hours worked per week—were found to be associated with rather modest differences in outdoor recreation behavior and will, therefore, be dropped from the tables in the rest of the report. An exception will be found in chapter 5, where the presence of young children and the number of hours in the work week are found to be important in

understanding the changing allocations of time and money to outdoor recreation.

#### Sex

The outdoors is no longer, as in previous centuries, a predominantly male domain. Women still exhibit a somewhat lesser tendency to commit time and money to outdoor pursuits, but their participation patterns are substantially similar to those of men—even in such "rugged" activities as horseback riding and skiing. Exceptions are fishing, golf, and (especially) hunting, in which the traditional male predominance persists.

#### Age

As in all previous nationwide surveys of outdoor recreation activity, increasing age is associated with a marked decline in all indicators of involvement with outdoor pursuits. This is especially severe in the age 60 and over category of our sample, 30 percent of which claimed to have participated in no outdoor recreation activities whatever during the prior 12 months. Chapter 6 of this report is a detailed examination of aging and outdoor recreation.

#### Place of Residence

The U.S. Office of Management and Budget has established 318 Standard Metropolitan Statistical Areas (SMSA's) in the United States, which typically consist of an aggregation of towns and counties surrounding a central city.<sup>4</sup>

Though the match is far from perfect, central cities are generally urban in character, areas within SMSA's but not in central cities tend to be suburban, and areas not in any SMSA are mostly rural. Rural-suburban-urban differences in culture, preference, and opportunity have been thought to be major influences on outdoor recreation behavior. The NRS data do not support this belief. There is a general, but slight, tendency of suburbanites to rank highest on the indicators, followed by rural residents and city people. Rural people predominate, however, in hunting, fishing, snowmobiling, and off-road vehicle driving.

#### Education

Increasing years of education are associated with substantially higher values for all outdoor involvement indicators and with increased participation in most activities. The principal exceptions are fishing and hunting, in which college graduates among our respondents engaged at lower rates than the population average. In addition to fishing and hunting, respondents of less-than-high-

Status as of January 1, 1984.

school education tended to participate in walking, picnics, pleasure driving, and visiting events and attractions. Twenty-nine percent of the non-high school graduates said they did nothing at all in outdoor recreation during the 12 months prior to the interview.

#### Race

Of the racial categories recorded in the National Crime Survey, only two-White and Black-were sufficiently well represented in the NRS sample to permit a detailed analysis. A third "other" category consisting mainly of Native American and Asian-American respondents is examined in chapter 5. Blacks are lower (usually much lower) than Whites on all indicators and all activity participation rates except outdoor team sports and "running or jogging." Other activities with substantial Black participation include bicycling, tennis, swimming, fishing, walking, picnics, pleasure driving, sightseeing, and visiting events and attractions. Black respondents started an average of 0.26 new activities during the 2 years prior to the survey, as compared to 0.39 new starts for Whites (table 1). Since the reported quitting rates for the two races are similar, this suggests that the Black-White gap in most activities probably widened during that period—at least for the age-12-plus population.

#### **Annual Family Income**

As in previous surveys, higher incomes are associated with higher rankings on outdoor recreation indicators including, as might be expected, dollar expenditures. This is consistent with the finding (table 10) that 20 percent of all respondents cite "not enough money" as a constraint on their outdoor recreation participation.

### Number of Persons in Household

Our indicators rise with increasing numbers of household members up to a size of four. Then they flatten out or decline in the highest (five or more) category. The same is true for most of the activity participation rates. It should be remembered, however, that many of the one- and two-person households consist of older persons who tend to be much less active.

### Household Members Under Age 12

The number of small children seems to have little effect on outdoor recreation indicators or participation rates. However, the data on reasons for changes in time and money allocations, analyzed in chapter 5, suggest that the birth-through-age-11

category is too broad to reveal the relationship of the presence of children to the recreation involvements of family members. A severe drop in family activity in the first few years of the child's life appears to be followed by a rise in later childhood.

#### **Marital Status**

The single (never married) respondents in the survey had the highest participation rates and indicators of involvement, followed by the marrieds, and (at a distance) by the widowed, divorced, or separated. For many persons, however, these life cycle stages parallel their progression from youth through old age. Hence, the implications of being married, single, etc., for outdoor recreation remain unclear.

#### Household Cars Owned

The availability of increasing numbers of cars and similar motor vehicles in a house-hold is strongly associated with more out-door recreation involvement. Especially dramatic is the severe drop in activity in the

no-car category. Part of this may be explained by the association of non-carownership with poverty and old age. No-car status is, however, often also associated with youth, which is strongly related to high participation. The strong propensity of young people to cite "inadequate transportation or too far to travel" as a constraint on their recreation activities (table 10) suggests a relationship with automobile access which warrants more attention from recreation providers.

Table 1. Outdoor Recreation Involvement by Demographic Characteristic

Demographic characteristic	Participated once or more in prior 12 months	Particularly enjoyed (maximum 3 activities)	Started in prior 2 years	Stopped in prior 2 years	Expect to start in next 2 years	t in prior 12	Average expenditure in prior 12 months (dollars) <sup>3</sup>
Total sample	7	1.7	.37	.14	.25	37	355
Sex							
Male	8 7	1.9 1.5	.38 .36	.14 .14	.24 .27	44 30	396 307
Age							
12 to 24	10 8	2.2 2.0	.89 .30	.09 .16	.39 .31	60 40	236 375
40 to 59		1.5	.13	.15	.19	27	413
60 and over	3	2.0	.08	.16	.07	12	391
Place of residence					0.7		
SMSA, central city		1.5	.30	.15	.27	29	336
SMSA, not central city		1.8 1.8	.38 .42	.14	.27 .22	40 40	383 333
Education							
Less than high school	3	.9	.10	.14	.10	13	275
High school		1.6	.22	.14	.23	30	363
Less than 4 years of college		1.9 2.1	.26 .29	.18 .20	.30 .32	40 44	419 450
Race							
White	8	1.8	.39	.14	.24	40	371
Black and other	5	1.4	.26	.11	.32	21	211
Annual family income (dollars)	_		0.5		00	0.5	000
Under 5,000		1.2	.27	.14	.23	26	200
5,000 to 14,999		1.4	.27 .38	.16	.19	27	260
15,000 to 24,999		1.8 2.0	.50	.14	.27 .30	39 48	335 430
50,000 or more		2.2	.40	.13	.31	51	536
Number of persons in household							
1	5	1.2	.17	.16	.17	23	324
2	6	1.6	.24	.16	.22	31	399
3	8	1.8	.37	.17	.29	39	345
4	9	1.9	.57	.12	.31	47	354
5 or more	8	1.9	.51	.09	.26	42	311
Household members under 12							
0,,	7	1.6	.36	.14	.25	35	362
1	_	1.9	.42	.14	.24	42	346
2	8	1.9	.39	.12	.31	41	353
3	7	1.9	.42	.12	.24	37	324
4 or more	. 6	1.8	.25	.13	.25	33	229

Table 1. Outdoor Recreation Involvement by Demographic Characteristic-Continued

		Average					
Demographic characteristic	Participated once or more in prior 12 months	Particularly enjoyed (maximum 3 activities)	Started in prior 2 years	Stopped in prior 2 years	Éxpect to start in next 2 years	•	Average expenditure in prior 12 months (dollars) <sup>3</sup>
Marital status							
Married		1.7	.22	.16	.21	32	402
Widowed, divorced, separated		1.2	.14	.17	.17	20	322
Never married	9	2.0	.57	.11	.39	48	245
Household cars owned							
None	_	1.0	.20	.13	.18	16	189
1		1.5	.32	.15	.22	29	290
2	_	1.8	.37	.16	.27	39	378
3		2.0	.45	.09	.32	46	399
4 or more	9	2.1	.49	.12	.25	51	392
Employment status							
At work		1.8	.31	.15	.27	39	376
With job, not at work		1.8	.25	.13	.30	35	394
Unemployed		2.0	.42	.14	.32	47	258
Keeping house		1.1	.17	.13	.17	20	312
Going to school		2.1	.76	.07	.38	55	200
Unable to work		1.0	.10	.32	.03	9	274
Retired	_	1.1	.12	.15	.07	14	423
Other	7	1.8	.43	.23	.28	36	290
Occupation							
Professional	9	2.1	.35	.19	.30	45	416
Manager		1.9	.25	.14	.27	38	492
Salesperson	_	1.9	.38	.18	.27	40	388
Clerical worker	_	1.7	.33	.17	.32	33	322
Craftsperson	_	1.9	.26	.17	.18	41	385
Operative	_	1.6	.24	.12	.22	33	340
Laborer	_	1.9 1.8	.34	.09	.29	42 37	255 274
Service worker Other	<u></u>	1.8	.37 .41	.20	.37 .29	41	253
	•	1.,	.41	.20	.27	41	230
Number of hours worked			0.7				
None		1.4	.27	.14	.22	28	317
1 to 20	_	1.9	.52	.12	.30	46	297
21 to 39	_	1.8 1.8	.34 .26	.17	.31 .25	38 36	341 388
40		1.8	.25	.15 .15	.25	41	430
		1.9	.23	.13	.24	41	430
Size of locality of residence (population)	_						
Under 5,000		1.6	.41	.15	.21	38	385
5,000 to 24,999		1.8	.39	.16	.22	39	352
25,000 to 49,999		1.7	.40	.14	.33	39	373
50,000 to 999,999		1.6 1.3	.29 .25	.14 .16	.26 .23	30 21	348 295
	. 3	1.3	.23	.10	.23	21	293
Region							
Northeast		1.6	.39	.13	.23	35	313
North Central		1.8	.37	.15	.27	35	370
South		1.6	.33	.14	.23	30	334
West	. 8	1.8	.43	.20	.32	37	414

<sup>&</sup>lt;sup>1</sup>Conservative estimate based on midpoints of ranges of days selected by respondents.

<sup>&</sup>lt;sup>2</sup>On a given calendar day, a person generates an activity-day for each activity participated in.

<sup>&</sup>lt;sup>3</sup>Average of midpoints of ranges from which the respondent selected an estimated expenditure level for outdoor recreation. See question 6h in the questionnaire, appendix C.

Standard Metropolitan Statistical Area.

#### Region

The United States is divided, for Census purposes, into four regions-Northeast. North Central, South, and West-as depicted in figure 8. The NRS respondents are identified with the region in which they lived at the time of the interview. The region where the cited outdoor activities actually took place is not available from the survey data. In many cases, the participation cited by the respondents probably took place outside their region of residence. Examples are ice and snow sports by southern residents and winter outdoor swimming, golf, etc., by northern residents. With few exceptions, however, regional differences in outdoor recreation involvement among the NRS respondents tended to be modest. Overall, the participation rates and involvement indicators tended to be lowest in the South and highest in the North Central States. The South was understandably very low in ice and snow sports participation, but led the country in hunting and fishing. The Northeast and North Central regions together led in most winter sports, with the Northeast topping the list in ice skating. An exception was downhill skiing, in which the West has taken a strong lead. The West was also preeminent in all forms of campingincluding backpacking—as well as in day

hiking. The North Central States led in motorboating and shared with the Northeast a strong lead in canoeing and kayaking.

#### **Employment Status**

The involvement indicators and participation rates suggest that going to school and being unemployed are the conditions most conducive to outdoor recreation (but not to spending money on outdoor recreation). In both cases, youth may have something to do with it.

#### Number of Hours Worked

The number of hours in the respondent's work week was derived from the response to a National Crime Survey question which asked, "How many hours did you work last week at all jobs?" Since "not enough time" is the most frequently cited constraint on recreation activity (in this and previous surveys), one would expect long work weeks to be associated with a lack of recreation involvement. According to our indicators, the reverse is true, although involvement flattens out at the longest work week (more than 40 hours). Little meaning attaches to the "none" category, which includes a great diversity of life conditions.

#### Size of Place of Residence

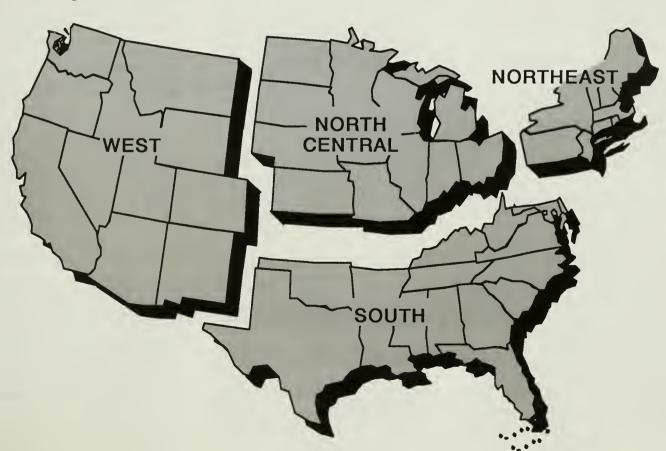
Population size, as a measure of the character of the respondent's community, is more strongly associated with outdoor recreation than was "place of residence" (SMSA) discussed earlier. And the association is negative. Residence in a city of 1 million or more people appears to be especially inconducive to outdoor recreation. On the basis of these observations, size of place of residence will be retained as a demographic characteristic in the remainder of this report, and place of residence (SMSA) will be dropped.

#### **SUMMARY**

This chapter has examined the extent to which various kinds of Americans pursue the outdoor life in their free time. The demographic segments of the Nationwide Recreation Survey sample will be examined later from the standpoints of trip taking, use of national parks and other recreation areas, attitudes towards fees and other management issues, and the changing allocations of time and money to outdoor recreation. First, however, the outdoor recreation phenomenon will be examined on the basis of the individual activities.

FIGURE 8.

Census Regions





CHAPTER 2

## Examining Outdoor Recreation Activities

The core of every nationwide recreation survey thus far is the part dealing with the individual outdoor recreation activities. This chapter will examine the 36 activities listed on the 1982-83 NRS (plus a few others) on the basis of dimensions or "yardsticks" derived from the survey data.

Table 2 presents the current (1982-83) status of the 36 activities with regard to three national summary statistics: the 12-month participation rate, selection by respondents as "particularly enjoyed," and the activity's implicit number of participants among the United States non-institutionalized population 12 years old or older. Table 3 compares, where possible, the current participation rates with those derived from the 1960 and 1965 National Recreation Surveys. The remaining tables in this chapter present a more detailed picture of the current activity data as well as constraints on participation and reasons for liking activities. Finally, there will be a brief narrative treatment of each activity's characteristics as inferred from this and other surveys.

With respect to 11 of the listed activities, the Forest Service, a major NRS cooperator, sponsored the collection of detailed trip information—principally travel, cost, and type of environment in which the activity took place. These trip aspects will be treated in chapter 3.

#### **ACTIVITY LIST**

Every recreation survey is limited, by factors of cost, respondent attention span, etc., in the number of activities it can ask about. The 36 outdoor pursuits on the 1982-83 NRS questionnaire were chosen in a lengthy design process in which more than twice that number were considered at one stage or another. The principal criteria by which the number was reduced to fit the survey's resources were:

· Comparability to the activity lists of the

1960 and 1965 National Recreation Surveys, and

 The information needs of the survey's sponsoring agencies.

In addition to the 36 listed pursuits, certain others will be examined in this report. Some of these are combinations of the listed activities. Others are unlisted activities cited in response to open-ended questions.

#### **Combined Activities**

Like most phenomena, outdoor recreation can be subdivided into a few large categories or many smaller ones. In four cases-boating, swimming, camping, and skiing, both approaches were used. Participation in boating, for instance, was recorded if the respondent claimed to have gone canoeing or kayaking, or sailing, or motorboating, or waterskiing, or engaged in any other boating or watercraft sport. Swimming was counted if the respondent chose "swimming in an outdoor pool" or "any other outdoor swimming" (or both, of course) from the list. Camping was similarly synthesized from the four camping categories (including backpacking) listed on the questionnaire. Finally, either "downhill skiing" or "cross country skiing or ski touring" was counted as "snow skiing."

#### Unlisted Activities From Open-Ended Questions

Respondents were given four opportunities to cite unlisted activities. The results of two of these open-ended questions will be found in table A-1 in appendix A. The first such question, in which the respondents were asked to cite up to three outdoor activities they particularly enjoyed, was asked before the activity list was introduced. The people in the survey cited a great many such activities, some of which—notably

softball—exceeded most of the listed activities on this popularity yardstick.

The second opportunity closely followed the introduction of the list. After the respondents were asked which of the listed activities they had engaged in once or more in the prior 12 months, they were asked: "During the past 12 months, did you take part in any other outdoor recreation activity?" A maximum of four such activities was recorded, but relatively few respondents cited even one. Most appeared to think that the lengthy list exhausted the survey's area of interest. Therefore the participation rates for the unlisted activities (table A-1 in appendix A) are definitely not comparable with those of the listed pursuits.

#### **YARDSTICKS**

In addition to the trip information to be addressed in the next chapter, nine dimensions or yardsticks will be used to describe the status of the listed activities and illustrate trends. Not all of the yardsticks are available for all the activities, as will be seen.

#### Population Participation Rate

For each listed pursuit (as noted earlier) the respondents were asked to indicate whether they engaged in the activity during the 12 months prior to the interview. The percentage answering yes is the population participation rate for that activity. These percentages are listed for the whole national sample of respondents in table 2 and for each demographic segment in table 4. For those activities similar enough to be compared with the 1960 and 1965 NRS, the comparison of participation rates for each of those years is made in table 3. These are single-season rates (summer in most cases) since 12-month rates could not be derived from the earlier data.

Table 2. Status of Activities: Participation Rates, Choice as Favorites, and Number of Participants

Activity	Total who said they participated in prior year <sup>1</sup> (percent)	Participants who said they enjoyed activity <sup>2</sup> (percent)	Implicit number of participants 12 yrs. or older (millions)
Bicycling	32	30	61
Horseback riding	9	40	17
Golfing	13	46	24
Tennis outdoors	17	45	32
Outdoor team sports	24	72	45
Other outdoor games or sports	13	(3)	24
Boating	28	16	53
Canoeing or kayaking	8	16	15
Sailing	6	19	11
Motorboating	19	(3)	35
Other boating or watercraft sport	6	(3)	11
Waterskiing	9	32	17
Swimming outdoors	53	18	99
Swimming in an outdoor pool	43	(3)	80
Other outdoor swimming	32	(3)	59
Fishing	34	58	64
Hunting	12	75	22
Camping	24	51	46
Backpacking	5	15	9
Camping in developed campgrounds	17	(3)	33
Camping in primitive campgrounds	10	(3)	18
Other camping	4	(3)	8
Day hiking	14	37	26
Walking for pleasure	53	17	100
Running or jogging	26	19	49
Birdwatching or other nature study activities	12	7	22
Picnicking	48	8	90
Driving for pleasure	48	•1	90
Sightseeing	46	42	86
but not snowmobiles)	11	9	20
Ice skating	6	10	12
Snow skiing	9	49	16
Downhill skiing	6	(3)	12
Cross-country skiing or ski touring	3	(3)	$\epsilon$
Snowmobiling	3	12	$\epsilon$
Sledding	10	1	8
Other outdoor winter activities	4	(3)	20
Visiting zoos, fairs, or amusement parks	50	41	95
Attending outdoor sports events	40	42	75
Attending outdoor concerts, plays, or other			
outdoor performances	25	41	48
Other activities (not on list)	4	_	_
No participation	511	_	521

Not ascertained for certain activities.

<sup>&</sup>lt;sup>1</sup>Percentage of the total sample of respondents who said they participated in the activity once or more during the prior 12 months. This is the annual participation rate.

<sup>&</sup>lt;sup>2</sup>Respondents were asked to name up to three activities that they "particularly enjoyed doing."

<sup>&</sup>lt;sup>3</sup>Eleven activities—largely aggregates or subsets for analytical purposes—were not selected as "particularly enjoyed." Respondents were asked to name their favorites before the activity list was introduced.

<sup>&</sup>lt;sup>4</sup>May not have been perceived as outdoor recreation activities by some respondents.

<sup>&</sup>lt;sup>5</sup>Non-participants.

Table 3. Activity Participation Trends, 1960 to 1982

(Percentage of respondents participating)

Activity	Summer 1960	Summer 1965	Summer 1982
D: without	9	16	28
Bicycling	6	8	7
Horseback riding	_	_	
Fishing	29	30	30
Canoeing or kayaking	2	3	8
Sailing	2	3	4
Swimming	45	48	51
Camping	8	10	19
Hunting <sup>1</sup>	13	13	10
Skiing <sup>2</sup>	2	4	9

<sup>&</sup>lt;sup>1</sup>Hunting during fall season.

NOTE: Percentage of respondents who said they participated once or more in selected activities during the 3 months before the interview, June, July, and August 1960, 1965, and 1982.

#### Favorite Activities

Choice of an activity as "particularly enjoyed" (maximum of three per respondent) or "most enjoyed" (limited to one activity) is an indicator of depth of involvement with, or commitment to, the activity. The percentage of participants who selected each of the 36 listed activities as particularly enjoyed will be found in the second column of table 2. For 29 activities, table 5 presents the percentages of all respondents, and of participants, who said they "particularly enjoyed" or "most enjoyed" the activity. The respondents named their favorites before seeing the NRS list of 36 activities. They could choose any activity they did outdoors, and they selected many that were not listed on the questionnaire (notably softball—see table A-1). These unlisted activities were classified into numerous categories during the survey coding process. The percentages of the respondents who chose each of these as particularly enjoyed will be found in table A-1 in appendix A.

Besides choosing many unlisted activities, the respondents also failed to choose seven of the listed ones. This was no surprise, since some of the activities on the list were artificial constructs foreign to the thought processes of the recreating public. Camping interests, for instance, should not be dismayed that nobody expressed spontaneous enthusiasm for going "other camping." Also, many respondents may not have perceived certain pursuits as "outdoor recreation" before seeing the list. This may account, in part, for the infrequent choice of such activities as pleasure driving and sightseeing.

#### Implicit Number of Participants

For each of the 36 activities in table 2, the final figure is the implicit number of par-

ticipants in the United States population (in millions). These estimates are of interest to many data users, but they are hazardous numbers and should be used with the greatest care. Their derivation is deceptively simple: basically they are what is obtained if the population participation rate is multiplied by 188,092,000—the Census Bureau's estimate of the number of noninstitutionalized persons 12 years old or older in the United States population at the time of the survey.

These population totals tend to create an appearance of greater accuracy than has actually been achieved. Users of these figures should bear in mind that—

- In addition to sampling error, recall error, nonresponse error, etc., these figures are now subject to the additional sources of error affecting the intercensal estimates of the number of persons in various segments of the United States population.
- 2. Even the target or "true" population totals are not the total numbers of fishermen, etc., in the United States, but rather the numbers 12 years old or over. The behavior of the under-12 years old group affects the meaning of the different activity totals in very different ways. The "implicit total" of persons who went swimming is a much more conservative indicator of the "real" total of United States residents who go swimming than is the corresponding "implicit total" for golfing.

### Demographic Profiles of Participants

The population participation rates in table 4 are most useful as a source of activity profiles of the various segments of the United States population. They address the question, "What are American women, young people, rural people, etc. doing nowadays in the outdoors?" Using the same data—the respondents' answer that they had gone bicycling, etc., during the prior 12 months—it is also possible to derive a demographic profile of a specific activity. This information, presented in table 6, addresses the question, "What kinds of people are bicycling nowadays?" Such a profile is derived by first separating out the people who say they did the activity (the participants) and then determining what percentage were women, young people, rural people, etc. This was done for the 24 listed activities for which at least 550 participants were identified among the 5,757 respondents in the survey sample.

### Annual Volume of Activity Per Participant

As noted in chapter 1, persons who identified themselves as participants in 22 of the 36 listed activities were asked to estimate the number of different days on which they did the activity during the 3-month and 12-month periods preceding the month of the interview.2 Table 7 lists the percentages of the participants in each activity (say bicyclists) who gave various estimates of the number of different days on which they did the activity during the prior 12 months. Note that the percentage base changes from the total sample of 5,757 respondents in the first column to participants in the activity (however many there happened to be) in the remaining columns.

Convenient activities—those which can be done close to home with little preparation or costly equipment—tend to have the highest estimates of activity-days per participant. Birdwatching (etc.), team sports, and bicycling, in which more than a third of the participants claimed they logged in excess of 25 days per year, stand out in this regard.

### Monthly Volume of Activity, by Season

In tables 8 and 9, the participants' (say bicyclists') estimate of the number of different days they did the activity during the

<sup>&</sup>lt;sup>2</sup>Skiing during winter.

<sup>&#</sup>x27;Since percentages are inherently abstractions from reality, it may be easier to keep in mind what they imply and—more importantly—do not imply.

<sup>&</sup>lt;sup>2</sup>Due to scheduling difficulties, it was necessary to postpone the post-fall interviews from December 1982 to January 1983. Therefore, the fall season was, in fact, 4 months long (September through December, 1982); and the spring season was 2 months (April and May, 1983). To compensate for these discrepancies, the seasonal estimates of activity-days were placed on a per month basis. (See tables 8 and 9.)

Table 4. Activity Participation, by Demographic Categories

(Percentage participating)

		Se	х		Ag	e			Education <sup>1</sup>	
Activity	Total sample	Male	Female	12 to 24	25 to 39	40 to 59	60 ør more	Less than high school	High school but less than 4 years of college	4 or more years o college
Percentage of total sample included in each category	100	48	52	27	29	25	19	26	55	19
Bicycling	32 9 13	33 8 20	32 10 7	55 18 16	37 10 13	22 5 13	7 1 7	11 2 4	28 8 12	37
Tennis outdoors Outdoor team sports Other outdoor games or sports	17 24 13	18 30 15	16 18 10	32 50 24	20 26 13	10 11 8	1 2 2	2 7 3	13 18 9	3: 2: 1:
Boating	28 8 6	32 10 7	24 7 5	38 14 9	35 9 7	25 6 5	9 1 2	11 1 1	28 7 4	4 1: 14
Motorboating Other boating or watercraft sport	19 6	22 7	16 5	25 8	23 7	17 4	7 2	8 2	19	2
Waterskiing	9 53	11 55	7 51	17 78	12 63	4 41	(x) 16	2 19	8 51	1:
Swimming in an outdoor pool	43	43 34	42 30	67 49	49 40	33 21	11 7	13 10	40	5:
Other outdoor swimming	32 34 12	47 22	23 3	43 15	40 40 13	31 13	17 5	26 10	34 12	3
Camping	24 5	27 6	22 3	36 9	30 5	19 2	6 (x)	10 (x)	25 4	2
Camping in developed campgrounds  Camping in primitive	17	18	16	24	22	15	5	7	19	1
campgroundsOther camping	10 4	11 5	8	17 6	11 5	6 4	2 1	3	9 5	1
Day hiking	14 53 26	15 45 30	13 61 23	19 57 51	17 58 31	12 53 13	5 42 2	3 35 6	13 56 20	2 6 3
study activities	12 48	11 45	12 51	10 52	12 59	12 46	13 29	6 29	13 51	1 6
Driving for pleasure	48 46	47 45	49 46	48 46	59 54	46 47	35 31	31 27	54 50	5 6
snowmobiles)	11 6 9 6	14 6 10 8	8 6 7 5	20 15 15 12	11 6 11 8	6 3 5 3	2 (x) (x) 1	3 1 1 (x)	10 4 6 5	1 1 1
Downhill skiing Cross-country skiing or ski touring	3	4	3	5	4	3	(x)	(x)	2	•
Snowmobiling	3 10 4	4 12 6	2 9 3	6 22 9	3 11 4	2 5 2	(x) (x) (x)	1 1 1	3 7 3	1
Visiting zoos, fairs, or amusement parks	50	50	51	65	62	41	26	26	51	6
Attending outdoor sports events	40	44	36	55	44	36	16	15	39	5
plays, or other outdoor performances Other activities (not on list)	25 4	25 5	26 3	34 4	29 4	22 4	12 3	10 2	24 4	4

Table 4. Activity Participation, by Demographic Categories - Continued

(Percentage participating)

		Ra	ce		Annual fa	mily incom	ne (dollars)		Nur	nber of p	ersons i	n house	hold
Activity	Total sample	White	Black	Under 5,000	5,000 to 14,999	15,000 to 24,999	25,000 to 49,999	50,000 and over	1	2	3	4	5 or more
D. A. CALL I													
Percentage of total sample included in each category	100	89	11	10	30	27	28	5	11	29	20	20	19
Bicycling	32	33	29	23	24	35	41	42	19	24	35	44	39
Horseback riding	9	10	4	7	6	9	11 20	15 27	6 9	6 13	9	14	11
Golfing Tennis outdoors	13 17	14 17	3 13	6 12	6 11	13 18	20	37	12	13	13 18	17 23	11 18
Outdoor team sports	24	23	27	22	19	25	29	28	14	15	26	31	34
Other outdoor games or sports	13	13	7	· 11	9	13	16	15	7	9	13	18	16
Boating	28	31	6	16	20	27	39	43	19	26	31	34	28
Canoeing or kayaking	8 6	9 7	1 1	6 4	5 3	8 5	12 9	10 14	5 6	7 7	8 6	11 6	10 6
Sailing	19	21	3	10	13	18	27	32	12	17	20	24	19
Other boating or watercraft			_										
sport	6	6	1	3	4	5	7	13	4	5	7	7	5
Waterskiing	9 53	11 55	(x) 32	5 34	6 39	10 56	13 67	14 71	5 31	7 42	11 59	12 67	9 60
pool	43	45	27	26	29	45	57	62	24	33	47	55	50
Other outdoor swimming	32	34	11	23	23	34	40	43	19	24 30	36 36	40	37
Fishing	34 12	35 12	27 7	24 8	30 12	38 14	38 14	35 8	19 5	10	13	42 13	38 15
Camping	24	27	6	15	19	29	31	25	14	21	27	30	28
Backpacking	5	5	1	3	3	5	7	5	4	4	5	6	5
campgrounds	17	19	4	8	13	20	25	17	8	15	20	20	20
campgrounds	10	11	2	7	7	12	13	9	6	8	10	13	10
Other camping	4	5	2	3	4	5	6	2	2	4	5	5	4
Day hiking	14 53	15 54	3 49	10 45	10 46	13 54	18 61	25 62	10 47	14 52	14 57	18 56	13 53
Running or jogging Birdwatching or other nature	26	26	30	21	20	27	33	37	17	18	27	36	34
study activities	12	13	5	10	10	12	14	19	12	15	10	12	8
Picnicking	48	49	42	36	41	53	56	58	34	41	55	57	52
Driving for pleasure	48	50	35	29	43	53	55	60	37	48	55	52	43
Sightseeing Off-road vehicle driving	46	47	36	27	38	48	57	67	35	46	51	52	40
(includes motorcycles but not		10	•	^	0	10	15	10		0	10	14	10
snowmobiles)	11 6	12 7	3 1	9 5	8	10 7	15 10	13 11	6 3	8 3	13 6	14 10	13 11
Snow skiing	9	10	1	5	5	7	13	21	7	9	8	12	7
Downhill skiing	6	7	(x)	4	4	5	9	18	6	7	6	9	5
Cross-country skiing or ski touring	3	4	(x)	2	2	3	5	8	2	3	3	5	3
Snowmobiling	3	3	(x)	2	2	4	4	4	1	3	4	4	4
Sledding	10	12	2	9	6	12	13	15	3	5	10	18	15
Other outdoor winter activities Visiting zoos, fairs, or	4	5	1	4	3	4	6	3	3	2	5	6	5
amusement parks	50	51	40	32	40	55	62	62	33	42	54	62	57
Attending outdoor sports events	40	41	33	24	30	43	51	61	23	33	43	49	47
plays, or other outdoor performances	25	26	21	17	21	24	32	38	23	24	28	27	24
Other activities (not on list)	4	4	1	4 28	3	4	4	9	4	5	4	4	4
No participation	11	10	18		18	7	4		25	15	7	6	7

Table 4. Activity Participation, by Demographic Categories - Continued

		Ma	arital status			Househ	old cars	owned			Regio	n	
Activity	Total sample	Marrried	Widowed, divorced, separated	Never married	None	1	2	3	4 or more	North- east	North Cen- tral	South	West
Percentage of total sample included in each category	100	60	17	23	9	27	35	16	13	22	25	34	20
mended in each ealegory													
Bicycling	32 9	27 7	18 4	44 14	21 4	27 6	35 9	39 12	37 16	34 7	38 10	27 8	31 13
Horseback riding	13	14	6	13	3	10	15	18	14	14	17	9	14
Tennis outdoors	17	13	8	30	10	14	18	21	20	16	17	16	19
Outdoor team sports	24	15	12	40	17	19	24	27	34	22	26	24	23
Other outdoor games or sports	13	9	6	18	7	11	13	16	15	12	16	10	15
Boating	28	28	17	31	11	21	31	34	40	28	34	24	27
Canoeing or kayaking	8	7	3	11	3	7	9	10	11	12	11	5	6
Sailing	6 19	5 19	4 12	10 19	3 5	5 12	7 22	7 22	7 30	8 15	6 24	4 18	7 18
Motorboating	19	19	12	19	3	12	22	22	30	15	24	10	10
sport	6	5	4	7	2	5	6	6	10	5	6	5	7
Waterskiing	9	8	5	14	2	5	11	11	15	7	10	10	9
Swimming outdoors Swimming in an outdoor	53 43	48 38	32 25	66 54	27 21	46 38	56 45	61 50	63 52	57 48	52 40	50 40	52 44
pool	32	28	19	43	14	26	34	38	41	36	33	30	27
Fishing	34	36	22	32	15	28	38	43	40	25	37	39	32
Hunting	12	13	5	12	3	8	12	16	21	9	13	15	9
Camping	24 5	24 3	14 2	27 8	8	17 3	27 5	30 6	38 6	19 5	24 3	20 3	33 9
Backpacking	3	3	2	0	3	3	3	Ü	U	3	3	3	
campgrounds	17	18	9	18	6	12	20	20	27	13	19	14	25
campgrounds	10	8	5	13	3	7	10	13	15	7	10	7	16
Other camping	4	4	3	5	1	3	4	7	8	4	3	4	7
Day hiking	14	13	7	19	6	11	16	16	18	13	15	9	23
Walking for pleasure	53	54	48	56	45	51	57	55	53	54	59	49	52
Running or jogging	26	18	14	45	19	22	28	28	34	25	24	26	31
study activities	12	13	10	9	6	12	12	12	13	12	15	8	12
Picnicking	48	51	38	47	30	45	53	53	50	45	56	40	55
Driving for pleasure	48	53	36	52	19	45	53 52	55 52	54	45 44	54 50	43 41	53 49
Sightseeing	46	49	34	48	22	41	52	52	49	44	50	41	49
snowmobiles)	11	8	5	18	2	6	10	15	24	9	12	9	14
Ice skating	6	4	2	10	2	6	6	9	9	11	8	3	5
Snow skiing	9	7	4	14	2	7	9	10	15	11	9	3	15
Downhill skiing	6	4	3	12	2	5	6	8	11	9	5	3	12
Cross-country skiing or ski touring	3	3	1	4	1	3	3	5	5	4	5	x	5
			0			0			_	-			0
Snowmobiling	3 10	3 7	2 4	4 14	1 3	2 8	3 11	4 15	7 13	5 15	6 13	x 6	2 9
Sledding	4		2	7	1	4	5	5	6	6	5	2	4
Visiting zoos, fairs, or													
amusement parks Attending outdoor sports	50		35	54	31	45	53	58	57	48	57	44	55
events	40	37	23	50	23	31	43	49	49	35	44	37	42
plays, or other outdoor performances	25	23	20	35	18	23	27	29	27	28	26	20	31
Other activities (not on list)	4		3	4	2	4	4	4	5	6	4	3	5
No participation	11	11	23	6	29	16	8	6	6	13	10	13	9

Table 4. Activity Participation, by Demographic Categories-Continued

(Percentage participating)

Activity Sample  Percentage of total sample included in each category 100  Bicycling 32 Horseback riding 9 Golfing 13 Tennis outdoors 17 Outdoor team sports 24 Other outdoor games or sports 13  Boating 28 Canoeing or kayaking 8 Sailing 6 Motorboating 19 Other boating or watercraft sport 6 Waterskiing 9 Swimming in an outdoor pool 43 Other outdoor swimming 32 Fishing 34 Hunting 12  Camping 124 Backpacking 5 Camping in developed campgrounds 17 Camping in primitive campgrounds 10 Other camping in primitive campgrounds 10 Other camping 14 Day hiking 144			Employment status								Size of locality of residence (population)			
Included in each category   100	At work		Unem- ployed	Keep- ing house	Going to school	Unable to work	Retired	Other	Under 5,000	5,000- 24,000	25,000- 99,999	100,000 999,999	1,000,000 or more	
Bicycling   32	55	5	4	20	3	2	7	5	14	24	26	25	11	
Horseback riding							·							
Golfing         13           Tennis outdoors         17           Outdoor team sports         24           Other outdoor games or sports         13           Boating         28           Canoeing or kayaking         8           Sailing         6           Motorboating         19           Other boating or watercraft sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	33 10	28 8	41 10	18 5	55 13	2 2	9 1	33 9	32 8	34 8	33 10	30 8	26 6	
Tennis outdoors         17           Outdoor team sports         24           Other outdoor games or sports         13           Boating         28           Canoeing or kayaking         8           Sailing         6           Motorboating         19           Other boating or watercraft sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	16	15	12	4	16	2	9	12	13	18	15	12	6	
Outdoor team sports         24           Other outdoor games or sports         13           Boating         28           Canoeing or kayaking         8           Sailing         6           Motorboating         19           Other boating or watercraft sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	19	18	25	6	36	0	ĺ	18	15	19	20	18	14	
Boating	25	18	34	7	39	4	1	29	24	24	26	22	15	
Canoeing or kayaking         8           Sailing         6           Motorboating         19           Other boating or watercraft sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	13	11	18	6	22	3	2	10	12	14	16	11	8	
Sailing         6           Motorboating         19           Other boating or watercraft sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	32	30	31	17	34	12	12	25	30	29	28	23	15	
Motorboating         19           Other boating or watercraft sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	9	8	9	3	10	1	2	10	10	9	8	6	5	
Other boating or watercraft sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed         17           Camping in primitive         17           campgrounds         10           Other camping         4           Day hiking         14	7	6	7	3	14	0	2	5	5	5	7	7	5	
sport         6           Waterskiing         9           Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	22	21	22	11	18	11	9	15	22	21	18	14	7	
Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	6	6	5	4	7	2	1	6	5	5	6	4	4	
Swimming outdoors         53           Swimming in an outdoor pool         43           Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	11	10	15	3	15	0	(x)	7	9	12	9	7	4	
Other outdoor swimming         32           Fishing         34           Hunting         12           Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	58	51	61	34	73	9	13	46	50	56	54	48	40	
Fishing       34         Hunting       12         Camping       24         Backpacking       5         Camping in developed campgrounds       17         Camping in primitive campgrounds       10         Other camping       4         Day hiking       14	46	42	47	27	61	4	10	38	41	45	45	39	33	
Hunting   12	36	33	39	19	42	8	4	25	30	36	30	27	20	
Camping         24           Backpacking         5           Camping in developed campgrounds         17           Camping in primitive campgrounds         10           Other camping         4           Day hiking         14	37	32	45	21	32	22	24	30	38	34	36	28	14	
Backpacking         5           Camping in developed         17           Campgrounds         17           Camping in primitive         10           campgrounds         10           Other camping         4           Day hiking         14	15	10	19	3	16	8	7	11	19	9	10	4	3	
Camping in developed campgrounds	27	24	26	16	26	6	7	26	22	25	27	22	15	
campgrounds 17 Camping in primitive campgrounds 10 Other camping 4 Day hiking 14	5	5	6	1	8	0	1	5	4	5	6	5	3	
Camping in primitive campgrounds	19	17	19	13	19	3	6	16	15	18	19	16	11	
campgrounds         10           Other camping         4           Day hiking         14	19	1,	1,	13	19	3	U	10	13	10	19	10	11	
Other camping         4           Day hiking         14	11	10	12	5	13	0	2	8	10	10	11	8	6	
	5	3	4	3	4	4	1	5	3	4	4	3	1	
	15	17	14	8	19	2	4	15	11	15	13	13	9	
Walking for pleasure 53		59	58	55	51	30	40	57	56	55	53	53	43	
Running or jogging	27	24	36	10	54	2	1	35	24	24	30	27	26	
Birdwatching or other nature		_												
study activities		17	9	13	7	13	10	14	15	10	11	10	4	
Picnicking		60 49	49 55	44 43	46 46	25 22	25 33	42 47	49 49	49 51	48 52	50 46	35 28	
Sightseeing		50	46	40	47	25	28	43	46	47	49	43	28	
Off-road vehicle driving (includes motorcycles but not														
snowmobiles)	12	13	13	5	23	0	2	11	10	11	14	9	5	
Ice skating 6		4	9	3	13	0	1	4	8	6	7	5	4	
Snow skiing		9	4	3	11	0	2	8	7	11	10	7	6	
Downhill skiing 6	8	6	4	2	10	0	1	5	4	8	7	6	5	
Cross-country skiing or ski touring	4	4	1	1	3	0	(x)	4	4	4	4	2	1	
		•		_		_			-	-	-		_	
Snowmobiling         3           Sledding         10				2	2	1	(x)	2 8	5	3	2	1 7	1 3	
Sledding			13 5		17 3	0	(x) (x)	8	11 4	10 5	11 5	4		
Visiting zoos, fairs, or	7	3	3		3	J	(^/	7	•	3	3	7		
amusement parks 50					50	20	25	49	48	51	53	49	41	
Attending outdoor sports events 40	44	44	42	24	58	14	16	35	37	43	41	40	26	
Attending outdoor concerts,														
plays, or other outdoor performances	29	26	29	18	32	12	12	26	20	26	30	20	90	
Other activities (not on list) 4					32	3	4	26	4	4	30 4	29 4	22 3	
No participation					6	42	29	14	11	11	9	13		

x Less than one half of one percent.

<sup>&</sup>lt;sup>1</sup>Education percentages are based on respondents 22 years old or older.

previous season (monthly basis) is averaged and listed. Table 8 presents these volume estimates for the entire United States, and table 9 gives the breakdown by the four census regions for 12 of the 22 activities. Seasonality is a major constraint on the production of outdoor recreation experiences per unit of resource capacity. That seasonality patterns vary by region, as well as among activities, may be seen in table 9.

### Constraints and Reasons for Liking, by Activity

In chapter 1, it was noted that respondents who cited an activity as particularly enjoyed were asked to select, from a list, their reasons for liking the activity and, if applicable, the constraints upon their pursuit of it. In this chapter, the percentages citing various constraints and reasons for liking

Table 5. Favorite Activities

	Total sam	ple	Participants		
Activity	Participated once or more in last year	Particularly enjoyed	Particularly enjoyed		
Bicycling	32	10	30	7	
Horseback riding	9	4	40	16	
Golfing	13	6	46	19	
Tennis outdoors	17	8	45	12	
Outdoor team sports	24	17	72	33	
Boating	28	5	16	5	
Canoeing or kayaking	8	1	16	3	
Sailing	6	1	19	7	
Waterskiing	9	3	32	10	
Swimming outdoors	53	10	18	6	
Fishing	34	20	58	18	
Hunting	12	9	75	28	
Camping	24	12	51	18	
Backpacking	5	1	15	6	
Day hiking	14	5	37	9	
Walking for pleasure	53	9	17	5	
Running or jogging	26	5	19	5	
Birdwatching or other					
nature study activities	12	1	7	2	
Picnics	48	4	8	2	
Driving for pleasure <sup>1</sup>	48	1	1	(x)	
Sightseeing <sup>1</sup>	46	1	2	(x)	
Off-road vehicle driving					
(includes motorcycles but					
not snowmobiles)	11	1	9	4	
Ice skating	6	1	10	3	
Snow skiing	9	4	49	17	
Snowmobiling	3	(x)	12	3	
Sledding	10	(x)	1	(x)	
Visiting zoos, fairs, or					
amusement parks <sup>1</sup>	50	(x)	1	(x)	
Attending outdoor sports					
events <sup>1</sup>	40	1	2	(x)	
Attending outdoor					
concerts, plays, or other					
outdoor performances <sup>1</sup>	25	(x)	1	(x)	

x Less than one half of one percent.

NOTE: Percentage of total sample and of participants who said they "particularly enjoyed" or "most enjoyed" selected activities. Respondents who said they engaged in the activity once or more during the prior 12 months were counted as participants.

outdoor recreation (tables 10 and 11) are used to characterize selected outdoor activities. This was only done for those activities (10 in number) for which at least 300 self-identified enthusiasts were available among the NRS respondents.

#### **Short-Term Trend Indicators**

The percentages of persons identified as having started or stopped participating in each activity in the prior 2 years, or who indicated that they "expected they might" take up the activity in the next 2 years, were introduced in chapter 1 as yardsticks for characterizing people. In this chapter (table 12) these percentages are used to characterize activities. Since future expectations are speculative by comparison with past behavior, the stopping and starting percentages should not be used to derive an indicator of net change. All three of these short-term trend vardsticks are useful for compansons among activities. Even here, however, caution is warranted. Many of the activities on the list are typically begun in early childhood. Hence, with a sample restricted to persons 12 years of age or older, the NRS data may not adequately reveal the rate of recruitment of new participants. Similarly, death is an unmeasured cause of participant loss.

### ACTIVITIES – STATUS AND TRENDS

The 36 listed activities—plus the four synthetic aggregates (boating, outdoor swimming, camping, and snow skiing)—will be examined in order of their appearance in tables 2 and 4. For the listed pursuits, this is also the order in which they appear on the questionnaire. For the sake of comparability, the order established in the 1960 and 1965 National Recreation Surveys was retained where practicable.

#### **Bicycling**

Bicycling has gained dramatically in the past 22 years on every available yardstick, more than tripling its population participation rate (table 3). Especially noteworthy is the increase in adult bicycling, which was practically insignificant in 1960. In the present survey, cycling is part of the free-time repertoire of 37 percent of the young adults (aged 25-39) and 22 percent of the middleaged (40-59 years). This greatly exceeds the most sanguine predictions of the early 1960's. On the depth yardstick of percentage of participants who cited the activity as particularly enjoyed, bicycling, with 30 percent, topped all the casual activities—those which can be enjoyed on the spur of the moment with little cost or preparation. Unsurprisingly, many (55 percent) of the

<sup>&</sup>lt;sup>1</sup>May not have been perceived as an "outdoor activity" by all respondents. The respondents were asked to name the activities they "particularly enjoyed doing" and "most enjoyed doing" before they were shown the activity list.

Table 6. Participation in Selected Activities, by Demographic Characteristics

(Percentage of participants1)

	Respondents who said they participated once or more in previous 12 months										
Characteristic	Total	Bicycling	Golfing	Tennis, outdoors	Team sports, outdoors	Boating	Pool swimming				
Total	100	100	100	100	100	100	100				
Sex           Male           Female	48	48	73	50	60	56	48				
	52	52	27	50	40	44	52				
Age 12 to 24	27	46	34	50	56	35	42				
	29	33	30	35	32	36	34				
	25	17	<b>2</b> 5	14	11	22	19				
60 or more	19	4	11	i	1	7	5				
Education  Less than high school	26	12	8	4	11	12	9				
	37	37	29	26	39	38	36				
	19	23	24	26	23	24	27				
	19	28	39	44	26	27	29				
Race White Black	89	90	98	91	87	98	93				
	11	10	<b>2</b>	9	13	2	7				
Annual family income (dollars) Under 5,000	10	7	5	6	9	5	6				
	30	22	13	19	24	20	20				
	27	29	28	28	28	26	28				
	28	35	43	35	33	40	38				
	5	7	12	12	6	9	8				
Number of persons in household											
1	11	6	7	8	6	7	6				
	29	22	30	23	18	27	23				
	20	21	20	21	21	21	22				
	20	28	27	28	27	26	26				
	19	23	16	21	28	19	23				
Marital status Married	60	55	67	48	45	63	58				
separated	17	10	8	9	10	11	11				
	23	35	<b>2</b> 5	43	45	26	32				
Household cars owned  None	9	6	2	6	6	3	5				
	27	22	20	22	21	17	24				
	35	38	40	37	36	41	37				
	16	20	23	20	18	19	19				
	13	15	15	16	19	21	16				
Employment status At work Not at work Unemployed Keeping house Going to school Unable to work Retired Other	55 5 4 20 3 2 7 5	62 5 6 13 6 (x) 2	70 6 4 6 4 (x) 5 5	66 5 7 8 8 0 (x)	68 4 7 7 6 (x) (x)	66 5 5 12 3 1 3 4	64 5 5 14 5 (x) 2				
Size of place of residence Under 5,000	14	14	14	12	15	18	14				
	24	26	32	26	26	30	26				
	26	27	29	29	29	27	28				
	25	23	21	24	24	20	23				
	11	9	5	9	7	4	9				
Region Northeast North Central South West	22	34	14	16	22	15	48				
	25	38	17	17	26	24	40				
	34	27	9	16	24	18	40				
	20	31	14	19	23	18	44				

Table 6. Participation in Selected Activities, by Demographic Characteristics—Continued (Percentage of participants¹)

	Respondents who said they participated once or more in previous 12 months									
Characteristic	Total	Outdoor swimming	Fishing	Hunting	Camping in developed campgrounds	Day hiking	Walking for pleasure			
Ongraceristic		***************************************	3		- camps.camas		ior picasari			
Total	100	100	100	100	100	100	100			
Sex	40	E 1	65	00	E1	50	44			
Male	48 52	51 50	65 35	88 12	51 50	52 48	40 60			
Age	07	40	24	22	27	07	O			
12 to 24	27 29	42 37	34 34	33 32	37 37	37 36	2			
40 to 59	25	1	23	27	21	21	2			
60 or more	19	5	10	8	5	7	1			
ducation	0.0	10	00	05	10	-				
Less than high school	26	10	22	25 44	12	7	1			
High school	37 19	37 26	40 21	44 19	40 26	29 26	3 2			
Less than 4 years of college 4 or more years of college	19	26 29	18	13	23	38	2			
Race										
White	89	96	91	93	98	98	91			
Black	11	4	9	7	2	2	1			
Annual family income (dollars)	10	3	-		4	-				
Under 5,000	10 30	7 22	7 27	6 28	4 21	7 22	2			
15,000 to 24,999	27	29	30	32	30	25	2			
25,000 to 49,999	28	35	31	31	39	37	3:			
50,000 or more	5	7	5	3	5	10				
Number of persons in household		_		_		0	1			
1	11	7 23	6 26	5 26	5 26	8 29	1 2			
2	29 20	23 23	21	20	23	20	2			
4	20	25	25	23	24	26	2			
5 or more	19	23	22	25	23	18	1			
Marital status										
Married	60	56	66	69	65	58	6			
Widowed, divorced, separated.	17	11	12	7	10	9	1			
Never married	23	33	23	25	25	33	24			
Household cars owned	9	4	4	3	3	4				
None	27	22	22	17	18	21	2			
2	35	38	38	35	40	40	3			
3	16	19	20	22	18	18	1			
4 or more	13	17	16	24	21	17	1			
Employment status		67	62	(0	64	61	5.			
At work	55 5	67 5	63 5	69 4	64 5	64 6	3			
Not at work	4	6	6	7	5	5				
Keeping house	20	12	13	5	15	12	2			
Going to school	3	5	3	5	4	5				
Unable to work	2	(x)	1	1	(x)	(x)				
Retired	7	1	5	4 5	2 5	2 6				
Other	5	4	5	5	5	O				
Size of place of residence	14	15	17	31	13	13	1			
Under 5,000	24	29	26	24	27	29	2			
25,000 to 99,999	26	27	30	30	30	25	2			
100,000 to 999,999	25	22	22	12	24	25	2			
1,000,000 or more	11	7	5	3	7	8				
· · · ·										
Region	00	26	0.5		12	10	E			
Region Northeast	22	36 33	25 37	9	13 19	13 15	5			
Region	22 25 34	36 33 30	25 37 39	9 13 15	13 19 14	13 15 9	5- 5- 4-			

Table 6. Participation in Selected Activities, by Demographic Characteristics-Continued

(Percentage of respondents)

Characteristic		11000		said incy par	ncipated office	or more in pre			
	Total sample	Jogging	Bird- watching, etc.	Picnicking	Driving for pleasure	Sight seeing	Visiting zoos, etc.	Attend out- door door sports perfo	
Total	100	100	100	100	100	100	100	100	100
Sex									
Male	48 52	55 46	45 55	44 56	47 53	47 53	47 53	53 47	46 54
Female	52	40	33	36	55	55	33	47	34
Age 12 to 24	27	52	22	29	27	27	35	37	36
25 to 39	29	35	29	36	36	35	36	33	34
40 to 59	25	12	27	24	24	25	20	22	21
60 or more	19	1	22	12	14	13	10	8	9
Education	96	0	12	16	16	15	15	11	10
Less than high school	26 37	8 32	13 36	16 38	16 38	15 36	15 37	11 36	12 32
Less than 4 years of college	19	26	24	22	23	23	24	26	24
4 or more years of college	19	34	27	24	23	<b>2</b> 6	25	27	33
Race									
White	89	87	96	90	92	91	91	91	91
Black	11	13	4	10	8	9	9	9	10
Annual family income (dollars)	10	8	8	7		6			7
Under 5,000	10 30	23	25	25	6 26	6 24	6 24	6 22	7 25
15,000 to 24,999	27	27	27	29	29	28	29	28	26
25,000 to 49,999		35	32	32	32	34	34	36	35
50,000 or more	5	8	9	6	7	8	7	8	8
Number of persons in household									
1	11	7 20	11	8	9	9	7	7	10
2 3	29 20	20	37 18	25 23	29 23	29 22	24 21	24 21	28 22
4	20	27	21	24	22	23	25	25	22
5 or more	19	25	14	21	18	17	22	23	18
Marital status									
Married		47	67	64	64	64	62	59	54
Widowed, divorced separated .  Never married		10 44	15 19	14 23	13 24	13 24	12 26	11 30	14 32
Household cars owned	25	77	19	23	24	24	20	30	32
None	9	7	5	6	4	4	6	5	7
1	27	22	29	25	25	24	24	21	25
2	35	37	35	38	38	39	37	38	37
3	16	17	17	18	18	18	19	20	18
4 or more	13	17	14	14	15	14	15	16	14
Employment status At work	55	64	52	60	60	61	60	64	62
Not at work		5	7	6	5	5	5	5	63 5
Unemployed	4	7	4	4	5	4	5	5	5
Keeping house		8	22	18	17	17	17	12	14
Going to school		8	2	3	3	3 1	4	5	4
Unable to work		x x	2 6	4	4	4	1 4	1 3	1 3
Other		8	6	5	5	5	5	5	5
Size of place of residence									
Under 5,000		13	21	15	15	15	14	14	11
5,000-24,999		22	24	25	26	26	25	27	24
25,000-99,999		29 25	28 23	26 26	29 24	29 24	28 24	27 <b>2</b> 5	29 27
1,000,000 or more		11	5	8	7	7	9	25 7	9
Region									
Northeast	22	25	12	45	45	44	48	35	28
North Central		24	15	56	54	50	57	44	26
South		26	8	40	43	41	44	37	20
West	20	31	12	55	53	49	55	42	31

NOTE: Limited to those activities in which 10 percent or more (550 or more) respondents said they participated once or more in the 12 previous months.

self-identified bicycle enthusiasts cited "to get exercise or keep in shape" as a reason for liking the activity. The appreciative component of the bicycling boom is also substantial. Fifty-nine percent of the respondents who particularly enjoyed bicycling cited the reason "to enjoy nature and the outdoors."

#### Horseback Riding

More stable in its participation rate since the 1960's, horseback riding is typical of those activities which require substantial investments of time and/or money to participate. It counts only 9 percent of the NRS respondents as participants but, of those who went horseback riding once or more in the prior 12 months, 40 percent cited the activity as particularly enjoyed. That this is a very respectable showing will be seen from

table 5. The demographic patterning of horseback riders is rather typical of outdoor activities and does not support the elite stereotype often associated with the sport. Also, by contrast to most forms of outdoor recreation, more women than men reported riding horseback.

#### Golfing

Men participate in golf at almost triple the rate of women. It is, however, one of the least age-related activities. Participation, once begun, holds up well through middle age and into the older years. The participation rates corroborate the popular impression of an upscale sport. Those in the least advantaged categories of education, race, and income participate at less than half the general population rate (13 percent) and at

Table 7. Annual Volume of Activity Per Participant

(By activity-day categories)

Activity	1 or more days	1 to 2 days	3 to 10 days	11 to 25 days	More than 25 days
Bicycling	100	12	32	19	38
Horseback riding	100	47	27	8	17
Golfing	100	28	34	17	21
Tennis outdoors	100	23	42	19	16
Outdoor team sports	100	13	30	18	38
Canoeing or kayaking	100	51	39	8	3
Sailing	100	56	30	6	8
Motorboating	100	33	39	17	12
Swimming outdoors Swimming in outdoor					
pool Other outdoor	100	14	38	19	29
swimming	100	19	42	20	19
Fishing	100	21	43	21	15
Hunting	100	19	42	22	17
Camping					
Backpacking	100	39	47	9	6
campgrounds	100	26	51	16	7
campgrounds	100	36	47	12	6
Other camping	100	35	44	16	5
Day hiking	100	28	47	14	12
nature study activities Off-road vehicle driving (includes motorcycles	100	15	29	14	42
but not snowmobiles)	100	23	39	21	17
Snow skiing	100	24	44	16	7
Downhill skiing	100	34	44	16	7
ski touring	100	51	35	10	4
Snowmobiling	100	40	36	14	10

NOTE: Percentage of participants (respondents who said they participated in the activity once or more in the prior 12 months) who gave different estimates of the number of different days on which they participated during the 12 months.

only one-fourth to one-sixth the rate of the most advantaged categories. Self-identified golf enthusiasts (46 percent of participants) have a strong tendency to cite fitness, enjoyment of the outdoors, and escape (to get away from day-to-day living or problems) as reasons why they enjoy their sport.

#### **Tennis Outdoors**

Though we have no 1960 data, a comparison of the 1965 and 1982 summer rates indicate that the proportion of Americans who play tennis has about tripled. The sport is somewhat less upscale than golf in its relation to income, and Blacks participate at almost as high a rate as Whites. Those who say they particularly enjoy tennis cite fitness as by far the most frequent motive. The social component of their enthusiasm—being with family and friends, and liking people who play tennis—is also substantial.

#### **Outdoor Team Sports**

Participation in outdoor team sports is still mostly a pursuit of young males, though women and mature adults maintain a respectable presence among the players. Team participation is almost totally unrelated to race or income. A slightly higher percentage of Blacks than Whites said they engaged in an outdoor team sport during the 12 months prior to the interview. "Other outdoor games or sports" includes such a diversity of pursuits (from croquet to orienteering, at least) that no demographic analysis will be attempted here.

#### **Boating**

The general population participation rate of 28 percent for boating is impressive, given the investments of time and money involved. The demographic patterns of boaters are somewhat upscale, and participation by Blacks is especially low. Sex is not an important factor, and boating participation holds up well through middle age. Virtually these same relationships are characteristic of the four component activities-canoeing or kayaking, sailing, motorboating, and "other boating or watercraft sport"-from which the "boating" data were synthesized. Canoeing or kayaking, however, had the largest growth with a quadrupling of the summer participation rate since 1960 (from 2 to 8 percent).3

#### Waterskiing

Self-identified waterskiers were counted in both the "boating" and the "swimming"

<sup>&</sup>lt;sup>3</sup>In the 1960 survey, the activity was referred to as \*canoeing." Theoretically, the absence of kayaking in the earlier version could inflate the appearance of growth. The distortion is probably minimal since kayaking was considered insignificant in the United States at that time.

Table 8. Monthly Volume of Activity, by Season

	Activity days of participation per month <sup>1</sup> <sup>2</sup>						
Activity	Spring	Summer	Fall	Winter			
Bicycling	4.0	4.7	2.9	2.2			
Horseback riding	1.7	2.6	1.6	0.5			
Golfing	1.9	2.6	1.2	0.7			
Tennis outdoors	1.9	1.9	1.1	1.0			
Outdoor team sports	4.2	4.1	2.6	2.5			
Canoeing or kayaking	0.3	1.0	0.3	0.1			
Sailing	0.8	1.4	0.4	0.2			
Motorboating	0.9	1.9	0.5	0.2			
Swimming in an outdoor pool	1.9	4.2	0.8	0.3			
Other outdoor swimming	1.0	3.0	0.3	0.5			
Fishing	1.9	1.8	0.7	0.6			
Hunting	0.6	0.5	2.2	1.1			
Backpacking	0.8	1.2	0.5	0.2			
Camping in developed campgrounds	0.6	1.5	0.6	0.4			
Camping in primitive campgrounds	0.6	1.4	0.5	0.3			
Other camping	0.5	1.1	0.4	0.3			
Day hiking	1.4	1.8	1.2	0.9			
Birdwatching or other nature study							
activities	8.7	6.7	5.9	5.3			
Off-road vehicle driving (includes							
motorcycles but not snowmobiles)	2.2	2.8	1.4	1.5			
Downhill skiing	0.2	0.1	0.3	1.4			
Cross-country skiing or ski touring	(x)	0.1	0.2	1.1			
Snowmobiling	(x)	0.3	0.1	1.4			

x Less than one twentieth of a day.

figures. This had little effect on those larger aggregates, since most waterskiers identified themselves as both boaters and swimmers in any case. The demographic pattern of waterskiers resembles boaters rather than swimmers, however, and the sport is overwhelmingly a pursuit of youth and young adulthood.

#### **Swimming Outdoors**

Outdoor swimming was already extremely popular in the 1960 survey with relatively little room for growth. There was a rise in the summer participation rate from 45 to 51 percent over the 22-year period. In this survey, a somewhat larger proportion of the respondents said they swam in outdoor pools rather than in other environments (lakes, rivers, ocean beaches, etc.). Both forms of the sport have a widespread following among all demographic segments and even hold up fairly well with advancing age. Self-identified swimming enthusiasts 18 percent of participants) tended to cite

fitness (exercise—keeping in shape) and social reasons (being with family and friends, liking people who swim) as reasons for their preference.

#### **Fishing**

· Even more than swimming, fishing has been stable since 1960, as inferred from the summer participation rates (29 percent in 1960 compared with 30 percent in 1982). More than twice as many men fished as women, but otherwise the sport was well distributed across the various demographic categories. Participation is virtually unrelated to income or education and holds up well with age. Fishing enthusiasts (58 percent of participants!) most frequently cite peace and quiet, getting away from day-to-day living, and enjoying nature and the outdoors as reasons. A much smaller number cited the prospect of catching fish as a motive, but this was not offered on the list of reasons and is, therefore, not directly comparable with the others.

#### Hunting

The demographic pattern of hunters among our survey respondents is unique—totally unlike that of any other activity's participants. The sport is almost entirely male. Of the participants, 88 percent were men and boys. It is also the most predominantly rural pursuit listed in our survey, with non-residents of a Standard Metropolitan Statistical Area (SMSA) four times more likely to be hunters than central city people—and twice as likely as suburbanites.

As with fishermen, the proportion of Americans who hunt appears to have been stable since 1960. Apart from the predominance of rural males, hunters are very well distributed across the demographic spectrum. Though only 12 percent of our respondents hunted, the sport tops the list for enthusiasm on the part of those who did. Seventy-five percent of the self-identified hunters said they particularly enjoyed the sport, and 28 percent cited it as their absolute favorite outdoor pursuit. Of the hunting enthusiasts, an impressive 71 percent cited enjoyment of nature and the outdoors as a motive. The social aspects were not frequently chosen by comparison with other outdoor activities. On the contrary, 30 percent cited solitude, rather than companionship, as a reason why they liked to hunt, while 46 percent said they hunted to get away from day-to-day living or problems. A few said they hunted for the meat but, as with fishing, this consumptive motive was not on the list and hence was not given a fair test.

#### Camping

Respondents who said they went backpacking, or camped in developed or primitive campgrounds, or engaged in any other camping activity during the prior 12 months were counted as camping participants. This is not exactly the same as the camping choice offered in 1960 and 1965, but it should be quite close. It appears (table 3) that camping as a whole has about doubled its population participation rate in the past 22 years. The self-identified campers-24 percent of the survey's respondents—are well (or at least typically) distributed across the various demographic segments of the sample. Camping enjoys a dedicated following, as evidenced by the 51 percent of participants who cited it as particularly enjoyed and the 18 percent who chose it as the one activity they most enjoyed. The reasons given for enjoying camping were predominantly appreciative

<sup>&</sup>lt;sup>1</sup>Average number of activity-days per participant per month. An activity-day was counted for each calendar day on which the respondent said he or she did the activity, even for a very short period.

<sup>&</sup>lt;sup>2</sup>Not ascertained for certain activities due to limitations on interview length.

<sup>&</sup>quot;Respondents who lived in an SMSA but not in a central city were presumed suburban. See "place of residence," in chapter 1, for a more detailed explanation.

Table 9. Recreation Participation, by Activity and Season

(Selected activities)

_	Activ	vity days of p per mon	-	on		Activity days of participation per month			
Activity and region	Spring	Summer	Fall	Winter	Activity and region	Spring	Summer	Fall	Winter
Bicycling	4.0	4.7	2.9	2.2	Backpacking	0.8	1.2	0.5	0.2
Northeast	3.7	4.7	2.5	2.2	Northeast	1.6	1.2	.2	.2
North Central	4.1	5.2	1.4	1.3	North Central	.2	2.8	.2	.0
South	3.3	3.9	4.1	3.3	South	1.1	.5	.4	.2
West	5.0	4.8	3.3	2.4	West	.4	1.1	.9	.3
Canoeing or kayaking	.0.3	1.0	0.3	0.1	Camping in developed	0.6		0.4	0.4
Northeast	.2	1.0	.4	x	campgrounds	0.6	1.5	0.6	0.4
North Central	.2	.9	.1	.1	Northeast	.3	2.8	.2	.1
South	.4	.5	.2	.2	North Central	.6	1.5	.4	.1
West	.5	1.5	.2	.2	South	.7	.7	.7	.5
***************************************					West	.7	1.7	.9	.8
Sailing	0.8	1.4	0.4	0.2	Day hiking	1.4	1.8	1.2	0.9
Northeast	.2	3.0	.1	.1	Northeast	1.9	.9	.6	1.1
North Central	.4	1.6	.1	.2	North Central	1.6	2.2	1.6	.8
South	2.0	.6	.5	.4	South	1.9	2.2	.9	1.0
West	1.6	.8	1.2	.1	West	.6	1.8	1.4	.6
					Birdwatching or other nature				
Swimming in an outdoor pool	1.9	4.2	0.8	0.3	study activities	8.7	6.7	5.9	5.3
Northeast	1.3	3.8	.5	.4	Northeast	11.3	8.5	6.9	4.6
North Central	1.0	3.8	.2	.3	North Central	11.1	6.4	5.6	7.0
South	2.4	3.8	.9	.2	South	4.1	7.6	10.4	4.9
West	2.9	5.4	1.6	.6	West	7.3	4.2	2.1	2.2
Fishing	1.9	1.8	0.7	0.6	Off-road vehicle driving (includes				
Northeast	1.4	1.8	.6	.7	motorcycles but not snowmobiles)	2.2	2.8	1.4	1.5
North Central	1.9	2.2	.5	.3	Northeast	2.9	4.6	1.5	2.0
South	2.6	1.7	.8	.9	North Central	3.4	1.6	1.0	7
West	.9	1.8	.9	.7	South	2.6	2.4	.9	2.2
***************************************	.,	1.0	.,	.,	West	.5	3.0	2.4	1.6
Hunting	0.6	0.5	2.2	1.1	Downhill skiing	0.2	0.1	0.3	1.4
Northeast	.5	.3	2.4	2.0	Northeast	.6	.2	.3	1.9
North Central	.6	.3	3.4	.3	North Central	(x)	(x)	(x)	1.6
South	.6	.4	1.5	1.4	South	.1	.0	.2	.9
West	.3	1.1	1.8	1.2	West	.1	.2	.4	.9

x Less than one half of one percent.

(enjoying nature and the outdoors, peace and quiet); change of pace (getting away from day-to-day living, doing something new or different); and social (being with family and friends, liking people who camp).

The same widespread participation pattern was characteristic of the component activities "camping in a developed campground," "camping in a primitive campground," and "other camping." Respondents were not prompted as to the difference between developed and primitive campgrounds. Most applied their own intuitive criteria, but those few who asked were told that primitive campgrounds had no improved roads, water taps, utility hookups, flush toilets, showers, stores, or laundry facilities. Campgrounds with one or more of these features were to

be considered "developed."

#### Backpacking

This is the first nationwide recreation survey to include backpacking—a combination of primitive camping with hiking. Backpacking, though it attracted only 5 percent of our respondents as participants, has become a major concern of land managing agencies. It is the principal means of access to many remote wilderness areas—environments which agencies are just now learning how to manage. Backpacking attracts few Blacks and drops off sharply with age. It attracts disproportionate numbers of the well educated. Otherwise, this pursuit is widely distributed across the income spectrum and other demographic categories.

#### Day Hiking

Hiking is another resource-oriented pursuit which shows substantial growth since 1960-to a current participation rate of 14 percent. With the exception of Blacks, only 3 percent of whom said they hiked, participation was very widely distributed across the demographic spectra of our respondent sample. Thirty-seven percent of the participants cited hiking as particularly enjoyed. The reasons given were predominantly in the appreciative and escape categories-enjoyment of nature and the outdoors (84 percent!), solitude, peace and quiet, and getting away from day-to-day living or problems. Fitness (to get exercise or keep in shape) was cited as a motive by 42 percent of the self-identified hiking enthusiasts.

<sup>&#</sup>x27;Average number of activity-days per participant per month. An activity-day was counted for each calendar day on which the respondents said they did the activity, even for a very short period.

Table 10. Percentage Who Gave Selected Reasons for not Engaging in Favorite Activities

•	Percentage of those who cited			Percent	age of tho	se who pa	articularly e	njoyed act	ivity²		
Reason	any activity as particularly enjoyed¹	Bicycling	Golf	Tennis	Swim- ming	Fishing	Hunting	Hiking	Walking	Camping	Softball
Not enough time	56	40	56	53	37	53	51	53	41	63	34
Not enough money	20	3	16	6	9	16	20	9	1	31	3
No place to do activity	19	7	2	10	16	9	13	12	4	15	8
No one to do activity with	17	9	10	22	8	8	6	9	8	15	16
Inadequate transportation or too far to travel	14	3	4	5	9	8	7	11	4	13	5
Crowded activity areas	13	2	10	13	12	6	5	4	1	13	4
Personal health reasons	8	2	6	4	4	5	5	5	8	4	7
Inadequate activity information	5	1	0	1	3	3	4	5	1	6	2
Poorly maintained activity areas .	5	2	1	4	4	2	1	2	1	1	2
Personal safety problems in activity areas	5	7	(x)	1	2	2	3	4	7	2	(x)
Pollution problems in activity areas	4	1	-	1	3	4	1	4	1	1	
Other reasons (not on list)	11	-	-	-	-	-	-	-	-	-	-

<sup>-</sup>Not ascertained for certain activities.

#### Walking for Pleasure

Roughly equivalent to "taking walks," walking for pleasure was defined, by virtue of being asked after hiking, as the casual residue of recreational walking. The few respondents who asked about the difference were told that hiking was "walking of a substantial nature requiring some degree of preparation, special clothing, supplies, and/or equipment," and that all other recreational walking (except backpacking) was to be counted as "walking for pleasure." Pleasure walking, with 53 percent of the sample participating, was tied with swimming as the most widespread activity in the 1982-83 NRS. The popularity of walking extends across all categories of the respondent sample, with no less than 35 percent participating even in the most disadvantaged groupings. With 42 percent, participation in pleasure walking by the older respondents (aged 60 or more) greatly exceeded their involvement with any other activity in the survey. Seventeen percent of the walkers said they particularly enjoyed the activity, mostly citing fitness and enjoyment of the outdoors as reasons.

#### Running or Jogging

As evidenced by this and other surveys, the penetration of running and jogging into the recreational repertoire of the American people can only be described as extraordinary. In 1960, running was limited to a relatively few young athletes. It was considered so insignificant as not to warrant inclusion in the 1960 National Recreational Survey (which included rock climbing)! In this survey, more than one in four respondents (26 percent) claimed to have run or jogged in the prior 12 months, and 19 percent of the runners cited the activity as particularly enjoyed. The proportion of runners among our respondents increases strongly with education and declines sharply with age. (Still, 13 percent of the age 40 to 59 category is respectable for an activity which is regarded as one of the most stressful sports in its demands on the cardiovascular system.) Otherwise, participation in running was well distributed across the demographic categories of respondents, with Blacks participating at a higher rate than Whites.

#### Birdwatching or Other Nature Study Activities

Nature study, judged by its rather even distribution across the demographic categories of respondents and the seasons of the year, is one of the most available of outdoor activities. The number of days per year on which participants engaged in this pursuit (table 9) is substantial. Nature study is the only activity on our list which actually

increases in participation—if gradually across the entire age spectrum. Given this apparent availability, the population participation rate of 12 percent is unimpressive, as is the 7 percent of participants who cited this activity as particularly enjoyed. The low participation by young people would appear to bode ill for the future of this pursuit. Comparison with other surveys indicates, however, that this is too bleak a picture. "Birdwatching or other nature study activities" was included in the NRS to capture, as far as possible in a single label, the wide spectrum of pursuits involving the "appreciative" or "nonconsumptive" enjoyment of nature. A comparison with the 1980 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation suggests that our label captured only a fraction of this type of behavior.5

That survey, with a similar but larger sample of a reasonably comparable target population (U.S. residents 16 years old or older), used a much more detailed series of questions to capture a definitionally narrower spectrum of pursuits than our "birdwatching or other nature study activities." The two activity-aggregates of greatest interest in

Percentages are based on the total (76 percent of all respondents) who cited one or more activities they "particularly enjoyed."

<sup>&</sup>lt;sup>2</sup>These are the ten activities cited as "particularly enjoyed" by the largest numbers of respondents.

<sup>&</sup>lt;sup>5</sup>U.S. Department of the Interior, Fish and Wildlife Service and U.S. Department of Commerce, Bureau of the Census. 1982. 1980 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. U.S. Government Printing Office, Washington, DC. Table 49 and tables 69-70.

Table 11. Percentage of Respondents Who Gave Selected Reasons for Enjoying Favorite Activities

	Percentage of			Percen	tage of the	ose who p	articularly e	enjoyed a	ctivity²		
Reason	those who cited any activity as particularly enjoyed	Bicycling	Golf	Tennis	Swim- ming	Fishing	Hunting	Hiking	Walking	Camping	Softball
Enjoy nature and outdoors	68	59	51	29	37	68	71	84	61	81	27
Get exercise or keep in shape Get away from day-to-day	66	55	55	57	52	19	21	42	55	29	55
living or problems	56	33	53	31	34	54	46	54	37	66	34
friends	53	32	44	39	39	36	27	35	20	58	57
l go	47	27	32	9	16	58	48	65	38	59	4
Like people who do activity Have special equipment for	34	12	41	25	20	21	20	20	10	29	44
it. Like using equipment	27	23	34	20	7	27	26	9	3	26	13
Not many people around To do something new or	25	15	9	6	9	28	30	38	17	32	1
different	21	13	10	10	10	11	9	16	7	24	8
Other reasons (not on list) $\dots$	10	4	5	6	5	4	5	5	4	1	7

<sup>&</sup>lt;sup>1</sup>Percentages are based on the total (76 percent of all respondents) who cited one or more activities they "particularly enjoyed."

checking our "birdwatching, etc." data are "primary nonresidential, nonconsumptive, wildlife-related activities," and "primary residential, nonconsumptive, wildlife-related activities." The difference between the two is that residential activities occur within 1 mile of home, and nonresidential activities occur everywhere else. The "primary" specification requires that the recreational occasion have the primary purpose of observing, feeding, photographing, or otherwise enjoying fish or wildlife.

Our "birdwatching, etc." definition is broader on two counts-secondary occasions are not, as such, excluded; and natural phenomena other than wildlife are included, such as plants, rocks, clouds, or stars. Nevertheless, the 1980 Fishing, Hunting, etc. Survey, obtained population participation rates of 49 percent for primary nonconsumptive wildlife-related activities as a whole—whether residential or nonresidential. The rate for the residential segment was 47 percent, and that for the nonresidential was 17 percent. Even the low participation of youth may be less of a cause for concern. This more detailed survey indicates that the proportion of the sample which participates in the nonconsumptive enjoyment of wildlife peaks in young adulthood (ages 25 to 34) with a slow decline thereafter.6

#### **Picnics**

Many people (48 percent of our sample) of all ages and conditions go on picnics, but few cite picnicking as a favorite activity. With a 51-percent participation rate, slightly more women said they picnicked than men (with 45 percent).

#### **Driving for Pleasure**

With summer participation rates of 53 and 52 percent, picnicking and driving for pleasure topped the list of activities in the 1960 National Recreation Survey. In 1965 they maintained their rank and increased their summer participation rates to 57 percent for picnicking and 55 percent for pleasure driving. They have not kept pace in the interim. Due to Census restrictions on interview length, the summer participation rates were not obtained for these activities in the current survey. However, the 12-month rate for both activities was 48 percent, and the summer rates could only be the same or (likely) lower. The availability of pleasure driving across all population segments continues to be impressive. With 35 percent participating, pleasure driving was the second most widespread activity among the age 60 and older group in our survey. Only walking for pleasure, with 42 percent, was cited by a larger number of senior citizens.

#### Sightseeing

Sightseeing has also fallen off a bit since the 1960's judged by the criteria stated above (1982-83 twelve-month participation rate compared with the 1960 and 1965 summer rates). Nevertheless, with 46 per-

cent of the sample saying they went sightseeing in the prior 12 months, it is clear that this activity is still very much a part of the nation's leisure patterns. There is a marked tendency of sightseeing participation to increase with more years of schooling. Otherwise, the activity is done widely by all population groups represented in the NRS sample.

# Off-Road Vehicle Driving (Includes Motorcycles but not Snowmobiles)

In addition to motorcycling, this aggregate of off-road motorized travel includes driving four-wheel drives, all-terrain vehicles, and beach buggies. It was not much of a factor in the 1960's and was not included in the earlier surveys. Almost the entire 11 percent participation rate can be considered to represent growth since that time. Driving off-road is well distributed across the various categories of respondents. Only Blacks, with 3 percent, are conspicuously underrepresented. Only 9 percent of the participants cited the sport as "particularly enjoyed."

#### Ice Skating

By comparison with the 1960's, ice skating, too, has declined slightly in the percentage of survey respondents participating. Even the 6 percent who did go ice skating tended not to cite the activity as especially enjoyed. This sport is overwhelmingly a pursuit of well-educated, northern, White, young people.

<sup>&</sup>lt;sup>2</sup>These are the 10 activities cited as "particularly enjoyed" by the largest numbers of respondents.

<sup>&</sup>quot;The behavior surveyed was that during calendar year 1980 in the Fishing, Hunting, etc. Survey, in which the interviews took place early in 1981. In the Nationwide Recreation Survey, the 12-month recall periods ranged from the fall of 1981 through the spring of 1983. These should be very comparable time periods, since there is little evidence of faddishness or instability in these nature observation activities.

#### Table 12. Short-Term Activity Trend Indicators

(Percentage who said they started, stopped, or intended to start activity during a 2-year period)

Activity	Annual participation rate <sup>1</sup>	Started in prior 2 years <sup>2 3</sup>	Stopped in prior 2 years <sup>2</sup> 4	Expected to start in next 2 years <sup>2</sup> <sup>4</sup>
Bicycling	32	5	5	3
Horseback riding	9	9	7	15
Golfing	13	21	8	15
Tennis outdoors	17	17	7	20
Boating	28	-	4	16
Canoeing or kayaking	8	27	3	16
Sailing	6	29	3	16
Waterskiing	9		8	26
Swimming outdoors	53	-	(x)	(x)
Fishing	34	6	5	5
Hunting	12	12	13	7
Camping	24	-	2	5
Backpacking	5	17	5	14
Day hiking	14	10	3	9
Walking for pleasure	53	-	1	1
Running or jogging	26	-	5	6
activities	12	13	(x)	2
Picnicking	48		1	(x)
Driving for pleasure	48	-	(x)	1
Sightseeing	46	-	1	1
motorcycles but not snowmobiles)	11	24	3	2
Ice skating	6	-	6	10
Snow skiing	9		5	24
Cross-country skiing or ski touring	3	42	3	33
Snowmobiling	3	24	7	19

- -Not ascertained for certain activities.
- x Less than one half of one percent.
- Percentage of total sample who said they participated once or more during 12 months prior to interview.
- <sup>2</sup>Expressed as a percentage of current participants (first column).
- <sup>3</sup>Based on the difference between age on starting the activity and current age. Not ascertained for cer-
- \*Persons who said they stopped during the prior 2 years and expect to start in the next 2 years were not included in these percentages.

#### Snow Skiing

Snow skiing, by contrast, has enjoyed rapid growth in the interval between 1960 and the current NRS. The 1960 winter participation rate of 2 percent left plenty of room for growth, but a quadrupling of that rate over a 22-year interval is still impressive. Skiing must be regarded as an upscale sport by any available yardstick, and it declines sharply with age. These conclusions can be drawn for snow skiing in general as well as for downhill skiing, which continues to attract the majority of snow skiing participants. Almost half (49 percent) of the self-identified skiers in our sample said they particularly enjoyed the sport.

## Cross Country Skiing or Ski Touring

Though cross country was the form of skiing originally brought to North America by immigrants from northern Europe, it had declined to insignificance by the 1960's and was omitted, as a separate category, from the 1960 and 1965 surveys. Its resurgence to a population participation rate of 3 percent in 1982-83 (4 to 5 percent outside the south) has occurred, therefore, from virtually a zero base. The demographic pattern of participation is similar to that for downhill, except that it is markedly less popular with the city people in our sample and holds up somewhat better into middle age.

#### Snowmobiling

Motorized oversnow vehicles have been used for several decades for transportation in regions with long periods of heavy snow cover. The recreational use of these machines was just getting started in the United States in the 1960's, hence snowmobiling was not included in the 1960 and 1965 surveys. The 3 percent of our respondents who said they went snowmobiling can be regarded as representing growth since 1960. The demographic patterning of our self-identified snowmobilers is similar to that of the cross country skiers—except that snowmobiling is not upscale on the education and income yardsticks.

#### **Sledding**

Judged by the winter participation rates of 9 percent, sledding (which includes tobogganing, tubing-on-snow, etc.) has been flat over the past 22 years with respect to the proportion of Americans who engage in it. The participation rate declines sharply with age, and the predominance of young people among sledders would doubtless be even greater if we had data for the under-12 population. Most of the other apparent demographic relationships of sledding participation (predominance of single persons in large households, etc.) are probably age-related.

### Visiting Zoos, Fairs, or Amusement Parks

With a population participation rate of 50 percent, this first of our "visiting and attending" activities ranked just below swimming and walking for third place on this breadth yardstick. This kind of visitation appears to be almost universally available to our respondents of all ages and conditions. Some of the 26 percent participation by the age 60 and older group is likely a part of the grandparenting process.

### **Attending Outdoor Sports Events**

Outdoor spectator sports attendance is also widespread among all groupings of the NRS respondents with a population participation rate of 40 percent. A summer comparison reveals an approximate doubling of the seasonal rate since 1960. Women are well represented among sports attendees—a contrast to the traditional male stereotype of the American sports fan.

#### Attending Outdoor Concerts, Plays, or Other Outdoor Performances

The final "visiting and attending" activity—and the last listed activity in the survey—includes attendance at a wide

variety of performances, historic pageants, and miscellaneous events. The summer participation rate for this activity more than doubled between the 1960 and the 1982-83 surveys. At 25 percent, however, the 12-month rate is still well below that for spectator sports. Attendance at outdoor performances rises markedly with increased educational attainment. Otherwise, this is one of the more widespread, and apparently more accessible, forms of outdoor recreation in our survey.

#### Other Activities

As noted earlier, respondents were given the opportunity to name as many as four unlisted activities in which they had participated, but few did so. The 12-month participation rates for those activities are presented in table A-1 in appendix A. The percentages of survey respondents who cited these activities as particularly enjoyed, also listed in the same table, often exceed the participation rates. This is a further indication that the participation rates are much lower than they would have been had those activities been listed on the questionnaire. The rates are useful for comparisons among the unlisted activities but not between the unlisted and listed activities.

#### No Participation

This is the first nationwide recreation survey which analyzes the segment of the respondent sample who said they did nothing at all for recreation in the outdoors during the prior 12 months (table 4). Of the total sample, 11 percent were in this

category—virtually unchanged from the 1960 figure of 10 percent. The preponderance of these people were in the older age groups, did not finish high school, were low on the income scale, and/or lived in one- or two-person households. Almost twice the proportion of Blacks were nonparticipants as compared to Whites.

#### SUMMARY

The first two chapters have profiled the 1982-83 NRS respondents on the basis of their participation in outdoor activities and characterized a number of outdoor recreation pursuits on the basis of the numbers and kinds of Americans who engage in them. The next chapter will examine selected aspects of the places where this recreation happens—and of the trips people take to get there.

**CHAPTER 3** 

### Places and Trips for Outdoor Recreation

Two of the cooperating agencies in the NRS consortium—the Forest Service and the National Park Service—each sponsored a series of questions about the locales where outdoor recreation takes place. The Forest Service required trip and destination data for particular activities to use in a planning model. The National Park Service needed information about the availability and use of outdoor recreation environments in relation to where people live.

#### PLACES FOR RECREATION

According to standards published by the National Recreation and Park Association (NRPA) in 1983, a variety of settings are needed to serve the recreation needs of the people in a community.1 Each type of setting provides different experiences and opportunities to engage in various activities. NRPA recommends provision of "local, close-to-home spaces" and defines these areas as easily accessible by neighborhood residents. These areas typically consist of intensely developed recreation facilities, natural environments, or a combination of both. Facilities on these nearby parks may range from ballfields to picnic areas to specialized equipment for limited populations such as tot lots or senior citizens parks.

In addition, NRPA also recommends the availability of regional parklands. These regional recreation spaces typically serve several communities within 1 hour's drive and are contiguous to or encompass natural environment areas. These areas provide the environment for nature-oriented activities and outdoor recreation dependent on a natural setting, such as boating or hiking. Although not addressed in the NRPA standards manual, other recreation spaces include

yards or areas located at residences and destination parks located more than 1 hour's travel time from a person's home. The 1982-83 NRS asked the respondents about all four types of recreation spaces—the areas' importance, availability, and personal use during the 12 months prior to the interview. These measures provide an indication of how the recreation estate is distributed, at least as measured through the perceptions of the American public.

The 1977 Nationwide Recreation Survey also asked respondents about the importance, availability, and use of these different outdoor settings. The 1982-83 NRS repeated these questions. Because of methodological differences in the conduct of the two surveys, a strict comparison of the data resulting from these two collection efforts is not recommended.

Table 13 shows that most (67 percent) of the respondents said having a yard or play area to use for outdoor recreation was very important. The percentage saying a recreation area was important decreased as the distance from home increased. However, over half the sample claimed that the existence of parks or outdoor places at each of the four distances was important.

A large majority (81 percent) of the respondents had a vard or play area at their residence available for outdoor recreation. Table 14 indicates that people less likely to have a yard included those living in the central city of a SMSA, living in residences with multiple-housing units, in a smaller household, non-White, or with lower incomes. Fewer people (63 percent) said they had parks or outdoor recreation areas available within a 15-minute walk. People living in the central city of an SMSA and in multiunit residences had more nearby parks available, somewhat compensating for the lower likelihood of having a yard located at their residence. People who had a yard or nearby park available for their use were more likely to say these areas were important.

Table 13. Importance of Recreation Areas at Various Distances From Home

(Percentage of respondents assigning levels of importance)

Very mportant 67	Somewhat important	Not very important
67	19	14
		14
39	32	30
34	36	29
25	27	48
	34	34 36

<sup>&</sup>lt;sup>1</sup>Lancaster, Roger A. (ed.). 1983. Recreation, park and open space standards and guidelines. National Recreation and Park Association, Alexandria, VA.

Table 14. Availability of Yards and Nearby Recreation Areas

(Percentage of respondents, by selected demographic characteristics, who said they had yards or neighborhood recreation areas available)

	N	leighborhood			Neighborhood	
Characteristic	Yard	area	Characteristic	Yard	area	
Total sample	81	63	Number of persons in household			
			1	65	63	
Number of housing units			2	78	62	
in residence			3	85	66	
III residence			4	88	63	
1	90	62	5 or more	85	63	
2	74	81	Race			
3	50	88	White	83	63	
4	44	72	Black and other	70	65	
5 to 9	52	67				
Over 10	47	71	A			
Mobile home	73	34	Annual family income (dollars)	67	50	
			Less than 6,000	67	58	
			6,000 to 9,999	72	59	
Place of residence			10,000 to 14,999	79	61	
SMSA,1 central city	69	81	15,000 to 24,999	86	65	
SMSA, not central city	85	64	25,000 to 49,999	88	66	
Not SMSA	87	48	50,000 and over	89	74	

Standard Metropolitan Statistical Area.

The use of parks or outdoor areas was inversely related with distance—the closer the area to a person's residence, the greater number of days it was used. However, as table 15 shows, a majority of the respondents used outdoor recreation areas at each distance at least once during the year. Those people who did not indicate they had a yard or nearby park available were not questioned about their use of these two areas.

## TRIPS AND OUTINGS FOR RECREATION

Only about a third of the respondents (32 percent) to the 1982-83 NRS answered

the questions about trips and outings. The subsample included persons aged 16 years or older who had made an outing or trip during the 12 months prior to the survey interview "primarily" to engage in at least one of the following activities: canoeing or kayaking, freshwater fishing other than trout or salmon, hunting other than big game, backpacking or hiking, camping in campgrounds, any other camping not in campgrounds, driving motorized vehicles off improved roads (including motorcycles), cross country skiing or ski touring, and snowmobiling. Information was collected only about trips and outings taken for the primary purpose of engaging in the specific recreation activity. The Forest Service, as

Table 15. Utilization of Outdoor Recreation Opportunities

(Percentage of respondents using outdoor recreation areas at various distances from home)

	Days ar	ea used in prior	12 months		
Area	Never	1 to 2	3 to 10	More than 10	
Yard or play area at residence	18	7	13	62	
Neighborhood parks and recreation areas (within 15-minute walk and 1 hr. travel time) $^1$	34	14	22	30	
Regional parks and recreation areas (between a 15-min. walk and 1 hr. travel time)	36	18	25	21	
Destination parks and recreation areas (more than 1 hr. travel time)	46	22	21	11	

<sup>&</sup>lt;sup>1</sup>Only respondents who indicated they had a yard or play area at their residence or a neighborhood park available were questioned about their use of these two areas.

sponsor of this series of questions, wanted to apply the travel and cost information to each specific activity, therefore they excluded multiple-purpose trips. The activities were, moreover, selected with a view to the data requirements of the assessment process mandated by the Forest and Range Lands Renewable Resources Planning Act. Hence the data analyzed here reflect only a limited sample of the total recreation travel engaged in during a 12-month period by a subsample of the NRS respondents. The activity definitions also reflect Forest Service analytical requirements. They frequently differ from those used in the rest of the survey (e.g., "non-big-game hunting"). The results should be interpreted with these limitations in mind.

Table 16 shows the percentage of respondents who reported information about outings or trips. The table also displays the percentage of the participants (respondents who said they did one of the nine selected activities in the past year) who took a trip primarily for that activity. A higher percentage (16 percent) traveled to go freshwater fishing than to engage in any of the other selected activities. As shown, of all the people who engaged in at least one of the nine selected activities, 70 percent took a trip or outing to pursue that activity. Participants were more likely to travel to engage in camping in campgrounds or hunting other-than-big-game animals. They were less likely to take trips to go snowmobiling or to go driving off improved roads.

Table 17 illustrates the number and percentage of trips or outings by activity and length of the outing. Figures in this table were left unweighted in order to show the numbers of trips or outings. Overnight trips accounted for half of the trips taken in these

activities. More trips or outings were taken to engage in fishing and campground camping than in any of the other activities.

For the remainder of the tables, information about other camping, cross country skiing, and snowmobiling has been eliminated because of small subsample size.

Respondents were asked about their most recent trip taken for each activity. To aid the respondent in recalling the trip, the interviewer asked the name of the main place where the activity was pursued. This information was recorded only to assist the interviewer in the conduct of the survey. Therefore, references to place refer to a specific area identified by the respondent.

Information about transportation mode, size of travel party, length of stay, distance and time traveled, and fees or charges paid were collected about each activity trip.

Table 18 aggregates the information about each activity trip. Multiple trips per year were taken to go driving off improved roads, freshwater fishing, or non-big-game hunting. People took shorter trips, in terms of time and distance, to drive off-road vehicles or to go freshwater fishing. More distance was traveled to go backpacking or hiking, but people traveled a longer period of time to go camping in campgrounds. Cars, trucks, or vans transported the majority of the recreation travelers. Pick-up campers,

Table 16. Trips or Outings to Engage in Selected Outdoor Recreation Activities

(Percent)	
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Activity	Respondents who took trip to engage in selected activity	Participants who took trip to engage in selected activity <sup>1</sup>
All activities <sup>2</sup>	32	70
Canoeing/kayaking	4	54
Freshwater fishing other		
than trout or salmon	16	54
Hunting, other than big game	7	63
Backpacking/hiking	6	43
Campground camping	13	68
Other camping	2	52
Off-road driving	4	39
Cross-country skiing	2	57
Snowmobiling	1	40

<sup>&</sup>lt;sup>1</sup>Participants are those respondents who said they engaged in the activity once or more in the 12 months prior to the interview—whether or not on a trip or outing taken specifically for that purpose.

camper-vans, and motor homes represented the second most popular mode of travel for not only camping but canoeing/kayaking, fishing, and hunting as well. Nearly 30 percent of the travelers driving off-road vehicles drove mopeds or motorcycles for travel to the recreation site as well.

The majority (80 percent) of travelers went to one destination to pursue the activity. A greater percentage of people traveling to backpack/hike or camp in campgrounds visited other places to do the same activity. Most trips regardless of activity lasted 2 days. Campground campers tended to stay longer (4 days) and off-road drivers typically completed their outing in a day or less.

Travel for these activities tended to be a social event, with an average of four persons in the traveling party. Canoeing or kayaking trips appeared to be taken in larger groups, averaging seven persons. Less than a third of the travelers paid any entry fees, activity fees, rentals, or other charges to engage in the activity. However, the majority of canoeing/kayaking or campground camping trips required payment of some fees. People who traveled to hunt or to fish in freshwater paid the highest fees.

The Recreation Opportunity Spectrum (ROS) is a system used by the Forest Service and other land-managing agencies to classify their land areas. The spectrum includes a range of settings from highly developed, more urban environments to wilderness areas with no evidence of human intrusion. According to the theory behind the ROS system, each setting results in a different experience for the recreationist, and land managers strive to provide a balance of these experiences. Therefore, the respondents were asked to provide further details about the environment in which they

Table 17. Trips for Recreation, by Activity and Length of Trip

			Length of	f trip			A 11 1	
	4 hours o	r less	5 to 24 hours		Over 24 hours		All trips <sup>1</sup>	
Activity	Number	Percent <sup>2</sup>	Number	Percent <sup>2</sup>	Number	Percent <sup>2</sup>	Number	Percent <sup>2</sup>
All trips or outings	573	20	863	30	1455	50	2909	100
Canoeing/kayaking	34	15	91	44	82	40	208	7
Freshwater fishing	222	25	354	39	327	35	905	31
Hunting	79	22	128	36	145	41	355	12
Backpacking/hiking	103	32	92	29	125	39	320	11
Campground camping	-	-	83	12	699	100	703	24
Other camping	-	-	14	16	87	100	88	3
Off-road driving	87	48	54	32	42	23	187	6
Cross-country skiing	37	39	34	36	23	25	94	3
Snowmobiling	11	22	13	27	25	51	49	2

<sup>-</sup> Not ascertained for certain activities.

NOTE: Figures are unweighted.

<sup>&</sup>lt;sup>2</sup>Refers to activities listed on this table only.

<sup>&</sup>lt;sup>1</sup>Totals do not add up across columns because of missing data about length of stay. The final column represents the total number of trips taken for these activities.

<sup>&</sup>lt;sup>2</sup>Percent of all activity trips.

Table 18. Characteristics of Trips and Outings

			Trips or outings to engage in:							
Characteristic	All trips or outings	Canoeing/ kayaking	Freshwater fishing	Hunting, not big game	Backpacking/ hiking	Campground camping	Off-road driving			
Average number of trips or outings per participant	6	3	9	9	5	4	12			
Average distance of destination from residence (miles)	148	151	105	104	244	208	103			
Average one-way travel time (hours)1	5	4	3	5	6	9	3			
Transportation mode (percent) Automobile	80 20	91 9	88 12	82 18	87 13	75 25	61 39			
Travel to other destinations on same trip (percent yes)	20	22	16	11	28	31	20			
Average length of stay (days) <sup>2</sup>	2	2	2	2	2	4	1			
Average number of people in the traveling party <sup>3</sup>	4	7	3	3	4	5	3			
User fee: Percent Average dollars/person4	32 22	59 17	28 20	16 42	17 5	70 13	8 10			

<sup>&</sup>lt;sup>1</sup>Rounded to the nearest hour. <sup>2</sup>Rounded to the nearest day. <sup>3</sup>Rounded to the nearest person.

Table 19. Destination Characteristics of Trips and Outings

		Trips or outings to engage in:						
Characteristic	All trips or outings	Canoeing/ kayaking	Freshwater fishing	Hunting, not big game	Backpacking/ hiking	Campground camping	Off-road driving	
Nearness of outing/trip destination to cities or towns (percent)								
In city or town	11	12	13	2	7	5	14	
Just outside	33	29	40	33	31	44	36	
Away	56	60	48	65	62	51	50	
Place accessible by motor vehicle <sup>1</sup>								
Percent yes	87	95	92	86	72	96	91	
Usual distance of participant to roads or trails <sup>1</sup>								
Less than 1/2 mile	50	56	73	48	25	74	26	
1/2 to 3 miles	34	34	21	40	44	23	49	
Over 3 miles	16	10	7	12	31	4	25	
Number of people encountered <sup>1</sup>								
Less than 3	30	6	31	60	33	19	42	
3 to 10	28	34	27	28	34	24	19	
11 to 50	27	41	29	11	21	38	23	
51 to 100	7	13	8	2	5	12	6	
Over 100	9	5	5	0	6	8	10	
Prominence of physical structures								
(dams, buildings, powerlines)1 3	2.4	2.4	2.7	2.2	1.9	2.5	2.1	
Prominence of industry activity (farms, quarries, mines) <sup>1 3</sup>	2.0	1.9	1.9	2.5	1.4	1.8	2.2	

<sup>&</sup>lt;sup>1</sup>Figures based only on outings or trips where the activity was pursued in a place away from cities or towns.

<sup>\*</sup>Rounded to the nearest dollar. Zeroes (trips not subject to a user fee) not included in average.

<sup>&</sup>lt;sup>2</sup>Refers to roads or trails open to motor vehicle use. For outings or trips to drive off improved roads, the question was rephrased to refer to the distance from an improved road, rather than a trail or road open to motor vehicle use.

 $<sup>^{3}</sup>$ Figures represent an average on a scale from 1 to 5. 1 = not noticeable; 5 = extremely noticeable and prominent.

recreated at their trip destination in order to place their experience in an ROS category. Table 19 describes the information obtained about these trips. As shown in the table, nearness of the place to an urban area, accessibility of the place to motor vehicles, number of people encountered while pursuing the activity, and prominence of human activity or presence represent measures which place the experience on a wilderness-to-urban spectrum.

A higher percentage of trips for backpacking or hiking took place in the wilder settings. More freshwater fishing trips and trips for camping in campgrounds took place at the opposite end of the spectrum, in strongly man-modified environments. However, the majority of trips or outings tended to depict wildland experiences. The figures in tables 18 and 19 were based on a small number of cases. The reader is cautioned against using these data to generalize about trips for outdoor recreation.<sup>2</sup>

\*For further information and more detailed analyses about the use of the data in the travel cost model and ROS planning, contact the Southeastern Forest Experiment Station, USDA Forest Service, Athens, GA 30602.

#### **SUMMARY**

Most respondents had access to both yards and neighborhood parks for close-to-home recreation. They used nearby recrea-

tion areas more frequently than those farther away, but most took at least one trip to an outdoor recreation destination more than an hour's travel from home during the 12 months prior to the interview.

Participants in certain activities were queried about the details of trips they took to engage in those pursuits. Most respondents in these activities took an average of six trips traveling about 150 miles to reach their destination. A large majority traveled by automobile, and stayed an average of 2 days. Four people usually made up the traveling party, and approximately \$20 per person were spent on user fees for the particular activity. Differences in these averages by activity illustrate the types of experiences generally encountered by outdoor recreationists.



CHAPTER 4

## Americans and Their National Parks

All respondents to the 1982-83 NRS were shown a list of the 48 national parks and asked to recall which, if any, of them they had ever visited. In this chapter, the results of this question will be used to examine the penetration of national park visits into the life-experience of various segments of the respondent sample. Where possible, comparisons will be drawn to the responses to a virtually identical question in a methodologically similar survey conducted in 1955.<sup>2</sup>

Based on the respondent's answers about his or her past experience of the national parks and future expectations of visiting them, two further sets of questions were asked to elicit public opinion about how park operations should be paid for and how park visits should be rationed in case of overcrowding. The responses to these questions will also be examined briefly in this chapter.

## WHY ASK PEOPLE ABOUT NATIONAL PARKS?

The National Park Service, which sponsored the questions examined in this chapter, currently administers 334 areas and sites, all of which are visited by the recreating public. Only 48 of these have been established by Congress as national parks. The rest range from remote national monuments through a variety of historic sites to the Statue of Liberty and the White House. Together with the national parks, these resources reflect the full richness and

complexity of the American heritage. The National Park Service, entrusted with their care, is interested in the various interactions between all of these areas and the American public.

It was deemed impractical, however, to cover such a large and conceptually unwieldy aggregation in a survey of the general public. Hence this series of questions was based on the 48 national parks, narrowly defined, and the respondent was shown the complete list of them to minimize doubt as to what was meant. This limitation has two principal effects on this examination of the results:

- 1. A direct comparison to the 1955 survey, referred to earlier, is possible and,
- The responses to the public opinion questions are directly applicable only to the 48 national parks. It is not unreasonable to expect, however, that public attitudes would be similar in the case of other resources—other Federal lands, State parks, etc.—which provide similar visitor services, such as camping or interpretive programs.

#### NATIONAL PARK VISITS AS AN AMERICAN EXPERIENCE-1950's AND 1980's COMPARED

The park visit experience will be examined first as it affects the entire NRS sample of today's United States population. A comparison will be made to the situation in 1955 as reflected in the Audience Research survey mentioned earlier. Finally, the 1982-83 sample of respondents will be broken down into the various demographic categories introduced in chapter 1 to see in what ways their national park visit experiences are similar or different.

## "Audience Penetration" of Today's National Parks

Table 20 lists the 48 national parks by region and, in the first column, the percentage of the total sample of 5,757 NRS respondents who recalled ever having visited each of them. The second and third columns—listing, respectively, the estimated total number of visits to the park in 1982 (in thousands) and the year the park was established—are included to help in interpreting the "audience penetration" figures in the first column.

Great Smoky Mountains National Park ranks first both in 1982 visits and in the percentage of the NRS sample who recalled having gone there. The Alaska parks, and Isle Royale National Park in Michigan, are near the bottom of both measures. Apart from these extremes, however, the numbers in the first and second columns are almost totally unrelated. A comparison between two of these parks, Acadia and Redwood, will illustrate the very different roles which the various national parks appear to fulfill for the visiting public.

Acadia National Park ranks just behind Great Smoky Mountains in 1982 visits with an impressive 3.6 million. However, although it has existed as a national park since 1919, only 4 percent of the NRS respondents recalled having gone there. By contrast, Redwood National Park recorded fewer than half a million visits in 1982, but 13 percent of our respondents said they had gone there. For a relatively new national park—established in 1968—such a penetration into the life-experience of the American people is most impressive.

Clearly, many millions of Americans have placed Redwood National Park on their lifetime must list of places to see, while relatively few have made a habit of going there. The reverse appears to be the case for Acadia which, if our sample accurately reflects the situation, draws its visitors from a

<sup>2</sup>Audience Research Incorporated. 1955. A Survey of the Public Concerning the National Parks. Conducted for the National Park Service, Department of the Interior. Princeton, NJ.

<sup>&</sup>lt;sup>1</sup>Visits are not the only ways in which people experience these parks. The national parks are part of the heritage of all Americans, and they are experienced in numerous vicarious ways—through the media, word-of-mouth, etc.—in addition to visits.

Table 20. National Park Visits

Region/ National park	Percentage of respond- ents calling visit	Thousands of visits to park in 19821	Year estab- lished²	Region/ National Park	Percentage of respond- ents calling visit	Thousands of visits to park in 1982 <sup>1</sup>	Year estab- lished²
Northeast				West			
Acadia (Maine)	4	3572	1919	Channel Islands			
				(California)	2	172	1980
South							
Big Bend (Texas)	3	180	1944	Crater Lake (Oregon)	6	436	1902
Biscayne (Florida)	3	348	1968	Glacier (Montana)	6	1666	1910
Everglades (Florida)	10	550	1934	Grand Teton (Wyoming)	9	2534	1929
Great Smoky Mountains	00	0170	1004	10.10			
(N.Carolina, Tennessee)	20	8178	1934	Kings Canyon (California)	4	531	1890
Cual-luna Manuscina (Tausa)	2	141	1972	Lassen Volcanic (California)	3	415	1916
Guadalupe Mountains (Texas) Hot Springs (Arkansas)	7	1016	1880	Mount Rainier (Washington)	6	1007	1899
Mammoth Cave (Kentucky)	8	1527	1941	North Cascades (Washington)	3	857	1968
Shenandoah-Skyline Drive	0	1327	1741	Olympic (Washington)	4	2479	1908
(Virginia)	12	1752	1935	Redwood (California)	13	467	1968
(Vilgilia)	12	1752	1733	Seguoia (California)	9	1021	1890
Midwest				Yellowstone (Wyoming,		1021	1000
Badlands (S. Dakota)	10	1031	1929	Montana, Idaho)	15	2369	1872
Isle Royale (Michigan)	1	13	1931	Yosemite (California)	11	2416	1890
Theodore Roosevelt (N. Dakota)	3	677	1947	resemble (camerna)	• •	2.10	1070
Theodore modern (The Danista)			-, ,	Alaska,Hawaii,Virgin Islands			
Wind Cave (S. Dakota)	3	467	1903	Denali (Alaska)	1	322	1917
Voyageurs (Minnesota)	1	144	1975	Gates of the Arctic (Alaska)	(x)	1	1980
, =,=3==== (- ====== ,				Glacier Bay (Alaska)	1	90	1925
Southwest				Haleakala (Hawaii)	3	772	1960
Arches (Utah)	2	339	1971	Hawaii Volcanoes (formerly			
Bryce Canyon (Utah)	6	472	1924	Hawaii National Park)	4	1995	1916
Canyonlands (Utah)	2	97	1964	Katmai (Alaska)	(x)	14	1980
Capitol Reef (Utah)	1	290	1971	Kenai Fjords (Alaska)	(x)	16	1980
Carlsbad Caverns (New Mexico) .	9	782	1930				
Grand Canyon (Arizona)	17	2293	1908				
Mesa Verde (Colorado)	5	603	1906	Kobuk Valley (Alaska)	(x)	4	1980
Petrified Forest (Arizona)	10	712	1962	Lake Clark (Alaska)	(x)	10	1980
Rocky Mountain (Colorado)	15	2564	1915	Wrangell-Saint Elias (Alaska)	(x)	15	1980
Zion (Utah)	6	1246	1919	Virgin Islands	2	674	1956

x less than one half of one percent.

small segment of the population. To amass such impressive annual visitation totals, therefore, it must be very highly regarded by a loyal—if limited, and probably regional—clientele. It is evident from this comparison that it would be hazardous to rely on any single measure of value, performance, or output in the case of a phenomenon as complex as a national park.

The foregoing comparison also illustrates the reason why the date of establishment is included in the third column of table 20. All 48 currently existing national parks have not had an equal chance to establish themselves in the American consciousness and attract visitation. Some of the visits recalled by our respondents occurred many decades ago. Indeed, one respondent's most recent national park visit was in 1903. Hence older

parks have had a greater opportunity to become part of the direct experience of the American people.<sup>3</sup> This should be kept in mind, especially, when interpreting the percentage figures for the most recently established national parks.

#### 1950's and 1980's Compared

In table 21, a comparison is made between the current NRS and the 1955 Survey of the Public Concerning the National Parks. The figures listed in each case are the percentages of the total sample of respondents who said they recalled having visited each park. Conceptually, this is the same measure of audience penetration as was used in the first column of table 20. Two differences should be noted:

 There were only 28 national parks in 1955. Only these are available for comparison, and they are the only ones listed in table 21. In fact, one of these, Platt National Park (Oklahoma), lacks any entry for the current survey. In 1976, it was redesignated as Chickasaw National

<sup>&#</sup>x27;Source: U.S. Department of the Interior, National Park Service. 1983. National park statistical abstract 1982. Denver, Colorado.

<sup>&</sup>lt;sup>2</sup>Source: U.S. Department of the Interior, National Park Service. 1982. Index of the national park system and related areas. Government Printing Office, Washington, DC.

<sup>&</sup>lt;sup>3</sup>For this reason, the year in the third column is not always that in which the area in question was designated by Congress as a national park. Many current national parks were formerly national monuments or other administrative units, but would be recognized by the public by their proper names. Visits to these areas during the prepark years would likely be recalled and cited in this survey. In such a case, therefore, the year given is that of its establishment as an area designated for public visitation under its current proper name. Badlands, for instance, was not established as a national park until 1978. The date given, 1929, is that of its establishment as Badlands National Monument.

Table 21. Changes in Lifetime Recall of National Park Visits

(Percentage of respondents in 1955 and 1982-83 surveys who recalled having visited selected national parks<sup>1 2</sup>)

		1982 to			1982 to
	1955	1983		1955	1983
National park	survey	survey	National park	survey	survey
0 . 6 . 1 . 11	11	21	71	2	7
Geat Smoky Mountains			Zion	3	/
Yellowstone	11	17	Acadia	2	4
Grand Canyon	10	18	Lassen Volcanic	2	3
Carlsbad Caverns	7	10	Mesa Verde	1	6
Yosemite	6	13	Olympic	1	4
Hot Springs	5	7	Wind Cave	1	4
Mammoth Cave	5	9	Big Bend	1	3
Shenandoah	5	13	Platt	1	( <sup>2</sup> )
Rocky Mountain	5	16	Hawaii Volcanoes (form-		` '
Sequoia	4	10	erly Hawaii National Park)	1	5
Everglades	4	11	Kings Canyon	1	4
Bryce Canyon	4	7	Denali (formerly Mt.		
Mt. Rainier	4	7	McKinley)	1	1
Grand Teton	4	10	Isle Royale	(x)	2
Crater Lake	3	7	Did not recall having		
Glacier	3	1	visited a national park	³63	<sup>3</sup> 44

x Less than one half of one percent.

Recreation Area and hence did not meet the criteria for inclusion in the 1982-83 list.

2. The 1955 survey was limited to persons 21 years of age or older. To meet this criterion, respondents younger than 21 were eliminated from the 1982-83 sample before the percentages in the second column of table 21 were generated. This accounts for the minor discrepancies in 1982-83 percentages between table 20 and 21.

A comparison of the 1955 and current percentages of respondents who recalled visits indicates that, to the degree that both samples are representative, all the then-existing national parks have increased, at least slightly, their penetration into the life-experience of the American people. In most cases, the percentage recalling a visit has at least doubled. In only a few instances—notably advances by Shenandoah, Rocky Mountain, and Grand Teton—did the relative standing of the national parks on this audience penetration measure shift dramatically.

## National Parks—Those Who Go and Those Who Don't

In the 1955 Audience Research survey, 63 percent of the respondents did not recall ever having visited a national park. In the 1982-83 NRS, less than half—46 percent of the sample—were unable to remember at

least one national park visit.<sup>4</sup> As will be seen in the first column of table 22, these non-visitors are concentrated in the lower educational and income categories, and Blacks are greatly overrepresented among them. The last column of the table—the people with a life list of at least 10 national parks—shows essentially a mirror image of this pattern. The demographic segments most seriously underrepresented in this heavy visitor group are Blacks (who are altogether absent) and those of low educational attainment.

# PAYING FOR NATIONAL PARKS – WHO AND HOW MUCH?

Reflecting a widespread concern with recreation fee policy, the National Park Service sponsored four NRS questions to elicit public opinion on this subject. The survey pretest showed that younger respondents found these questions irrelevant and difficult to answer. In the full-scale survey therefore, these fee and policy questions were asked only of respondents 16 years old or older. This limitation applies to the remainder of this chapter and to the

following chapter on Trends in Time and Money Expenditures as well.

The first two fee questions elicited the respondent's maximum willingness to pay for a one-time entry as well as for an unrestricted annual pass to the national parks. For these questions, the spectrum of respondents was further restricted to those who had indicated they were at least "somewhat likely" to visit a national park in the next 3 years. The results are depicted in table 23. The first four columns list the percentages of respondents who said they would pay various maximum one-time entry fees, and the final four columns give the same information for annual passes.

Maximum willingness to pay declines clearly with age. It increases, though less consistently, with income. There is little difference between educational levels or between people who claim various likelihoods of visiting a national park in the future.

These willingness-to-pay questions are predictions of personal behavior. Little can be inferred from them regarding the respondent's perception of the fairness, wisdom, or desirability of various fee policies. Therefore, two direct, fee-policy questions were also asked. Here, since these issues of fiscal policy are relevant to the population at large, the respondents with little likelihood of future national park visits were again included.

In the first of these fee policy questions, the respondent was asked to choose the most desirable of five ways of splitting an assumed 5-dollar-per visit park operating cost between the visitor (fees) and the taxpaver. The choices ranged from "all from the visitor" through "half and half" to "all from the taxpayer." The results, displayed in table A-2, in appendix A, indicate that cost sharing between the taxpayer and the visitor was preferred by 53 percent of the eligible respondents. Seven percent said they preferred to have no visitor fees (to pay the whole operating cost from taxes), but 28 percent said to charge the entire cost to the visitor.

In the last of the national park fee guestions, the respondent was shown a list of four services provided to park visitors, and asked "As I read the list, please tell me whether the costs of each should be paid for by visitors or from taxes." The results are summarized in tables A-3 through A-6, in appendix A. Again, the response pattern was highly consistent across the various categories of respondents. Regardless of previous national park experience or expectation of future visits, respondents chose visitor charges over taxes by margins of 2 or 3 to 1. This was especially pronounced in the case of "rides on buses or other ways of getting around the park" with 61 percent favoring visitor fees, and least so for "special talks and exhibits" with 41 percent. The other two services—"operating campgrounds" and "operating advance reservation systems

<sup>&</sup>lt;sup>1</sup>Respondents age 21 or older.

<sup>&</sup>lt;sup>2</sup>These were the 28 national parks existing in 1955. Platt National Park was redesignated Chickasaw National Recreation Area in 1976 and was excluded from the 1982-83 survey.

<sup>&</sup>lt;sup>3</sup>Total number of parks available for visiting was 28 in 1955 and 48 in 1982-83.

<sup>\*</sup>This apparent 18-percent difference reflects more than an increased propensity of present-day Americans to visit national parks. The opportunity to log a visit has increased dramatically with the creation of 21 new national parks since 1955. In some regions, it would now require a modicum of care and planning to maintain an unblemished lifetime record of national park avoidance.

Table 22. Number of National Parks Ever Visited, by Demographic Characteristic

		imber of pai centage of re			Averag
emographic characteristic	None	1 to 4	5 to 9	10 or more	number of parks visited
Total sample	47	33	11	8	2.68
Sex					
Male Female	46 48	34 33	12 11	8 8	2.7 2.6
remaie	40	33	11	0	2.0
Age	F.C	24	7	0	
12 to 24	56 43	34 37	7 12	3	1.5
40 to 59	43	33	15	8 11	2.6 3.4
60 or more	47	29	12	12	3.4
	47	2)	12	12	3.3
Education		0.0		0	1.0
Less than high school	66	26	6	3	1.2
High school	47	35	11	7	2.5
Less than 4 years of college	31	37	17	15	4.1
4 or more years of college	24	37	21	18	5.1
Race					
White	42	36	13	10	3.0
Black	83	15	1	0	.3
Annual family income (dollars)					
Under 5,000	69	22	5	3	1.2
5,000 to 14,999	56	31	8	6	1.9
15,000 to 24,999	47	35	12	7	2.5
25,000 to 49,999	33	39	16	12	3.6
50,000 or more	26	33	23	17	4.9
Family size					
1	46	32	12	10	2.8
2	41	33	15	12	3.5
3	44	36	11	9	2.7
4	48	36	10	6	2.2
5 or more	54	34	8	5	1.9
Marital status					
Married	41	35	14	10	3.1
Widowed, divorced, separated	51	30	11	9	2.5
Never married	55	30	8	6	2.0
Household cars owned					
None	76	17	4	3	.0
1	53	31	9	7	2.3
2	43	35	13	10	3.0
3	39	38	13	10	3.3
4 or more	37	39	15	9	3.3
Employment status					
At work	44	34	13	10	2.9
Not at work	38	39	12	11	3.4
Unemployed	51	38	7	5	1.8
Keeping house	47	34	12	7	2.6
Going to school	57	30	11	2	1.4
Unable to work	66	14	10	10	2.5
Retired	52	26	12	11	3.2
Other	53	32	8	7	2.1
Size of locality of residence (population)					
Under 5,000	46	38	10	7	2.2
5,000 to 24,999	42	36	14	9	3.0
25,000 to 99,999	45	32	13	10	3.0
100,000 to 999,999	46	31	12	10	3.0
1,000,000 or more	71	19	6	5	1.4

for camping and other services"—fell between these extremes.

This was a forced-choice question. The respondent was given no alternatives beyond those of charging the visitor or charging the taxpayer. Perhaps the most remarkable result was that a substantial proportion of the respondents (17 to 26 percent) rejected both of these choices and insisted that the four services should be paid for by a combination of fees and taxes. This insistence on the - middle ground, in the absence of any indication that this would be an acceptable answer, suggests that a preference for costsharing of visitor service expenses is very widespread among the public-that a much higher percentage would have chosen the combination option if explicitly offered.

## HOW TO RATION NATIONAL PARKS – RANKING OF FOUR OPTIONS

Peak season crowding has become a major problem in the more popular national parks. Various methods of limiting visits during such periods have been under discussion for many years. A question was inserted in the 1982-83 NRS to test the public's reaction to four such possibilities. Again, the response pattern was consistent across our groupings of respondents with various past park experiences and different expectations of future visits. The nonpark-visiting segment deviated somewhat from this consistency, in that they, and they alone, showed a substantial tendency to reject the rationing of park visits outright. The results of the responses to this rationing question are summarized in tables A-7 through A-10 in appendix A.

Of the four rationing methods presented, "letting people reserve park visits ahead of time with reservations taken on a first-come, first-serve basis" was clearly the most popular, with 65 percent of the respondents citing it as their first choice. Next was "letting people apply in advance to reserve their park visits, then drawing names to find out who gets reservations." This option received 42 percent of the second choice votes. The other two rationing methods—"turning people away who come after a limit of people are in the park" and "charging an extra 5 dollars per adult visitor during the summer in crowded parks" were not ranked highly by most of the survey respondents.

#### **SUMMARY**

Chapters 3 and 4 have examined, from the recreation visitor's standpoint, the various locales—from back yards to national parks—where outdoor recreation takes place. In the final two chapters, the focus will shift back to individuals where they live. These chapters will examine people's changing commitments of time, money, and personal involvement to outdoor recreation throughout the life cycle.

Table 23. Maximum Acceptable National Park Entry Fees

(Percentage of respondents who said they would pay various maximum amounts for one-time entries and annual passes to national parks by demographic characteristic<sup>1</sup>)

	Maximum amount for one-time entry (dollars)			Maximum amount for annual pass (dollars)						
Demographic characteristic	.25 to 2.49	2.50 to 7.49	7.50 to 14.99	15.00 to 29.99	30.00 to 100.00	5.00 to 9.99	10.00 to 19.99	20.00 to 29.99	30.00 to 59.99	60.00 to 100.00
Total sample	17	53	20	8	2	13	18	35	22	12
Likelihood of visiting a national park  Very likely in next 12 months	17	51	21	9	2	11	17	39	21	12
Less likely in next 12 months but very likely in next 3 years	14	53	22	9	3	11	19	35	23	13
Somewhat likely in next 3 years	18	55	19	7	2	16	18	32	22	11
Sex	17	53	20	8	3	12	19	35	20	1.0
Male	17	53	20	8	2	14	17	35	24	14 11
Age 16 4 24	15	52	19	10	4	10	11	21	20	10
16 to 24	17	55	21	10 7	1	10 13	11 19	31 38	30 22	19 9
40 to 59	19	51	21	7	2	16	22	36	15	11
60 and over	17	54	19	9	1	17	25	33	15	11
Education										
Less than high school	24	49	16	9	3	21	18	27	20	14
High school	19	55	19	6	1	14	20	35	21	11
Less than 4 years of college	16	51	22	8	2	12	19	39	20	10
4 or more years of college	12	56	22	8	2	10	22	41	21	6
Race White	17	54	20	7	2	13	18	36	22	12
Black and other	20	41	19	14	6	17	15	31	21	17
Annual family income (dollars)										
Under 5,000	23	46	19	6	7	17	19	22	27	15
5,000 to 14,999	20	51	19	9	1	15	18	30	22	16
15,000 to 24,999	17	54	21	7	2	12	18	36	23	11
25,000 to 49,999	16	56	20	7	1	13	18	38	21	10
50,000 or more	12	45	30	10	2	11	17	47	18	8
Family size					_			0.5		
1	17	51	20	10	2	14	19	36	18	13
2	14 20	54 52	22 20	9	2 2	11 15	20 16	35 36	24 23	11 10
34	16	56	20	7	1	11	19	38	23	9
5 or more	21	51	18	8	3	17	16	30	18	19
Marital status				_	_					
Married	18	54	19	7	1	15	21	36	20	9
Widowed, divorced, separated	19	49	23	8	1	16	18	35	18	13
Never married	15	51	20	10	4	9	12	33	27	19
Household cars owned	_				_					
None	17	47	23		3	15	20	30	19	16
1	18	52	19		2	15 12	16	32 35	22 23	14 9
2 3	18 16	53 54	20 21		2	14	20 18	34	23	12
4 or more	14	54	22		4	12	15	40	18	15
Employment status	•	0.		, and the second	•			,,,		10
At work	16	54	20	8	2	11	19	36	22	12
With job, not at work	18	50	24	7	1	21	19	33	17	9
Unemployed	20	62	11	7	0	15	23	25	22	14
Keeping house	20	53	23	6	1	19	17	35	20	10
Going to school	23	38	23		2	13	7	26	34	20
Unable to work	27	47	19		0	16	14	39	31	0
Retired	20 19	51 47	19 15		2 8	16 13	26 15	31 35	16 22	11 15
Other	19	47	15	10	8	13	15	35	22	15
Size of locality of residence (population) Under 5,000	18	55	22	5	1	17	21	29	24	10
5,000 to 24,999	17	51	22		2	10	17	37	22	15
25,000 to 99,999	14	53	21		3	13	17	38	22	11
100,000 to 999,999			18	7	2					

Respondents who were 16 years old or older and indicated that they were at least somewhat likely to visit a national park in the next 3 years.



#### CHAPTER 5

### Trends in Time and Money **Expenditures**

Since the nationwide survey conducted by the Outdoor Recreation Resources Review Commission in 1960-61, samples of the American public have listed reasons why they do not participate in outdoor recreation as often as they would like. As shown in table 24, two of the more frequent

Table 24. Outdoor Activity **Constraints** 

(Percentage of respondents citing constraint)

Constraint	1960	1982-83
No constraints Lack of time Lack of money	28 52 13 84	6 56 20 54

historically listed constraints have been lack of time and lack of money. In the 1982-83 NRS, the respondents aged 16 and over were asked if their time and money expenditures had changed in the past 2 years and if they expected changes in the next 2 years. If they indicated a change in expenditures, the respondents were asked the reason(s) for the change.

The purpose of these questions was twofold: to find out if time and money expenditures were changing in the short term and to discover the reasons people gave for changing the amount of time and money they spent on outdoor recreation. The results provide some insight into what facilitates or limits participation in outdoor recreation.

#### **CHANGES IN TIME EXPENDITURES**

Only persons 16 years and older were asked the questions about time expenditures. The first question asked if the respondent was spending more, less, or

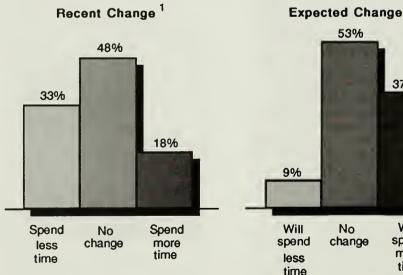
about the same amount of time on outdoor recreation in the present (1982 or 1983) compared to 2 years earlier (1980 or 1981). The second question asked if the respondent expected to spend more, less, or the same amount of time on outdoor recreation 2 years in the future (1984 or 1985). Figure 9 shows that 18 percent of the adult respondents were spending more time presently compared to 2 years ago, but 33 percent were spending less time. A

slightly greater percentage (53 percent) of respondents said they would maintain their present time commitments for the next 2 years compared with those (48 percent) who had not changed during the 2 years prior to the survey. People were optimistic about spending more time in the future. Thirty-seven percent intended to spend more time engaging in outdoor recreation in the next 2 years and only 9 percent intended to spend less.

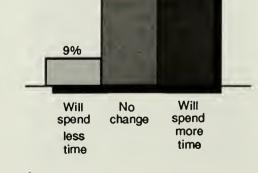
#### FIGURE 9

#### Recent and Expected Changes in Time Spent on **Outdoor Recreation**

(Percentage of Respondents Age 16 or Older Who Cited Increasing, Decreasing, or Unchanging Allocations of Time.)



Recent change in time spent on outdoor recreation compared to 2 years prior to the interview.



37%

Expected change in time spent on outdoor recreation during the 2 years following the interview.

The NRS activity questions provided two approximate indicators of the amount of time people spent in outdoor recreationnumber of activities and number of days engaged in these activities during the 12 months prior to the interview. Figure 10 shows that the people who said they were spending more time now than 2 years ago were doing more activities than other respondents-an average of 10 in a list of 36. The entire sample aged 16 and over participated in an average of six activities. The people who said they planned to spend more time in the next 2 years already were slightly more active, with an average of eight activities in a year. Those spending less time or not changing their present or future level of activity averaged six activities, reflecting the sample's average. It appears from these results that about half of the adult population did not alter their allocation of time to outdoor recreation significantly over a 4-year

Figure 11 shows the number of activity-days people said they engaged in outdoor recreation.¹ Respondents at least 16 years old spent an average of 35 activity-days participating in the recreation activities listed on the NRS questionnaire. The pattern was the same as that for the number of activities. People who spent more activity-days than the average also said they spent or intended to spend more time in outdoor recreation.

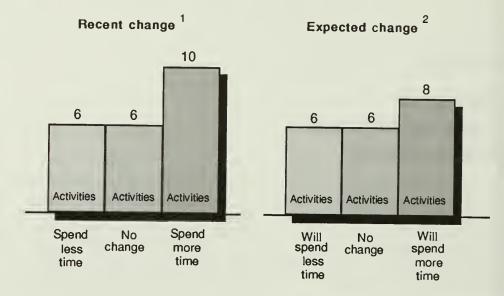
The typical respondents indicating decreased time expenditures for both the present and the future were aged 40 and over; earning an annual income of \$10,000 to \$15,000; Black; separated, divorced, or widowed; and/or engaged in 1 to 10 recreation activities from the NRS list. Those persons with increased time expenditures for both the present and the future typically were aged 25 to 40; working 1 to 20 hours per week; earning annual incomes of over \$25,000; married; engaged in over 15 outdoor recreation activities; in a family of at least four persons; college educated; and/or living in the suburbs within an SMSA.2 People in a family of three indicated a reduced time expenditure over the prior 2 years but expected to spend more time in the future. In the opposite case, persons aged 16 to 24 expected to engage in less outdoor recreation 2 years in the future but were presently spending a great deal of time. In appendix A, tables A-11 and A-12 illustrate the relationship of these demographic characteristics to changes in time expenditure.

The respondents who did not indicate a change in their time expenditures over the prior 2 years or in the future included many people not working; with annual incomes of

#### FIGURE 10

Average Number of Activities Engaged in by Persons Citing Various Changes in Time Spent on Outdoor Recreation

(Respondents Age 16 or Older)

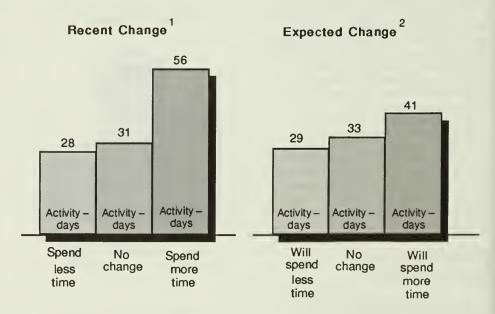


Recent change in time spent on outdoor recreation compared to 2 years prior to interview.

#### FIGURE 11

Average Annual Number of Activity – Days of Participation by Persons Citing Varions Changes in Time Spent on Outdoor Recreation

(Respondents Age 16 or Older)



Recent change in time spent on outdoor recreation compared to 2 years prior to interview.

<sup>2</sup>Expected change in time spent on outdoor recreation during the 2 years following interview.

<sup>&#</sup>x27;Activity days are defined in chapter 1 and listed in table 1.

<sup>\*</sup>These generalizations are based on a combination of central tendencies. Few individuals share all of these characteristics.

<sup>&</sup>lt;sup>2</sup> Expected change in time spent on outdoor recreation during the 2 years following interview.

less than \$10,000; not engaged in any outdoor activities; in a family of one or two persons; with an education less than a high school level; and/or living in rural areas.

Open-ended questions asked the respondents why they changed the amount of time spent on outdoor recreation to find out from the respondents directly what they perceived as limiting or facilitating the time they spent in outdoor recreation. Table 25 lists the percentages of responses to these followup questions concerning expenditure of time. In appendix A, tables A-13 through A-16 define the system used to code these open-ended responses and detail the percentages obtained for each response.

The facilitating factors that coincided with spending more time in outdoor recreation included the family, certain lifestyle changes (such as gain of a companion, doing more, enjoyment of a particular recreation activity, change in recreation activity), more time and/or money available, work-related reasons, gain of equipment, and access to or availability of physical resources. Increasing age of children was the most consistent response given for spending more time. Work-related reasons such as retirement or change in number of working hours also accounted for more time spent. As shown in chapter 1, the pursuit of outdoor recreation decreases as age increases. Retirement is perceived by the individual as an opportunity to spend more time in outdoor recreation. However, the amount of activity individuals pursue will likely be less than they pursued in younger years. As shown in table 4, the decline in activity begins when individuals are in their forties, well before retirement age for the majority of workers.

The primary competitors with outdoor recreation for an individual's time were work and school. Lifestyle changes, health problems, and lack of time/money also contributed to less time spent in outdoor recreation. Lifestyle changes in this category included "getting older" or "aging," the most consistent response. Family responsibilities such as child care also contributed to less outdoor recreation time spent. The age of children, not simply the presence of children in the household, influenced the amount of time parents spent in outdoor recreation.

### CHANGES IN MONEY EXPENDITURES

The survey also asked similar questions regarding the expenditure of money on outdoor recreation. Only those respondents aged 16 and older who had spent money for outdoor recreation in the 12 months prior to their interview were asked the ques-

tions on how their expenditures had changed. A total of 65 percent of the sample spent money on outdoor recreation. Table 26 lists the demographic characteristics of the persons who said they had spent money on outdoor recreation during the past year. They were typically people who were in smaller households, White, earning greater incomes, and college graduates. Most respondents aged 60 and older said they did not spend money on outdoor recreation.

Figure 12 illustrates how much the respondents said they spent on outdoor recreation during the 12 months prior to the interview. A wide range of expenditure patterns is evident. Before the question about how much money they spent, the respondents were asked what they spent money on and were given a list of items. Figure 13 illustrates that user fees, sporting goods, and travel accounted for most of the spending with clothing and equipment as other major expense items. Other expenses included license fees, rentals, and special classes.

Respondents who cited more than one type of expenditure were asked, "On which one of these did you spend the most money?" "Travel costs for outdoor recreation" was the most frequent response.

Figure 14 indicates a slightly different picture for money expenditure changes than that shown for time expenditures. Respondents tended to spend a larger percentage of their money on outdoor recreation in 1982-83 than they did 2 years before, and expected to spend even more in the next 2 years. Less than half of the respondents said their expenses had remained the same or expected them to stay the same. Inflation appears to have influenced these responses, as an examination of the reasons for the change illustrates.

Income, age, marital status, and employment status showed a relationship with the expenditure of money. About one in five respondents in each age category said they were spending a smaller percentage of their income on outdoor recreation in 1982 than 2 years before. However, a disproportionate number of the younger respondents spent more in the present than 2 years ago, and most of the respondents aged 40 and over were spending about the same amount. The older respondents also intended to remain at the same expenditure level for the next 2 years. People who had never married claimed to be spending more of their income on outdoor recreation than 2 years before and expected to spend an even larger percentage in the future. As income level increased, the proportion of persons spending a larger percentage of their income on outdoor recreation increased. In appendix A, tables A-17 and A-18 list the demographic characteristics of persons by their expenditures of money for outdoor recreation.

When the respondents were queried about why they were decreasing their money expenditures, about half listed lack of money or lack of time, as shown in table 27. Spending money on outdoor recreation was associated with lifestyle changes such as doing more activities and purchasing equipment. Inflation was a common constraint. Many people said they were spending an increasing percentage of their money (both over the prior 2 years and in the future) because of inflation; however, they did not indicate a decrease in their pursuit of outdoor recreation.

Figure 15 illustrates the relationship between time and money expenditures. Only respondents who spent money on outdoor recreation and were at least 16 years old are reflected in these percentages. The majority of the respondents who claimed they spent a larger percentage of their income on outdoor recreation also said they spent more time. The same correlation was shown for those spending the same or a smaller percentage of their income. However, this correlation was not perfect, showing that different factors influenced the amount of time and the amount of money spent on outdoor recreation.

#### **SUMMARY**

As in past surveys, the most frequently cited constraint on outdoor recreation participation was lack of time, followed by lack of money. Respondents aged 16 and older were asked about changes in their allocations of time and money to outdoor recreation over the prior 2 years, and about any anticipated changes in the next 2 years (figures 9 and 14). About half cited no change, past or future. Of those whose time allocations had changed, the number who cited a decrease in time spent was almost double the number of those who claimed to be spending more time on outdoor pursuits. By contrast, about four times as many respondents anticipated a rise as expected a decline in time spent over the next 2 years. Relatively few respondents cited a reduction in dollar expenditures for outdoor recreation, either past or future.

The most common reasons cited for changes in time spent in outdoor pursuits were related to the changing stages of the life-cycle. Next to old age, the most constraining life-condition seems to be the early child-rearing years. This is followed by a rapid increase as the children become older.

Table 25. Reason for Spending More Time or Less Time on Outdoor Recreation

(Percent)

Reason for spending more time	Respondents citing reason <sup>1</sup>	Reason for spending less time	Respondents citing reason <sup>1</sup>
Lifestyle changes, includes gain of companion, change in recreation activity, enjoyment of a specific activity	25	Work, includes school	26 <b>2</b> 5
More time and/or money available	23	Lack of time and/or money available	18
Family	22	Poor health	16
Work, includes retirement	14	Family responsibilities	11
Health	8 4	Lack of equipment	2
Resource opportunity	4	Resource opportunity	2

<sup>&</sup>lt;sup>1</sup>Age 16 and older.

Table 26. Characteristics of Respondents Who Spent Money on Outdoor Recreation

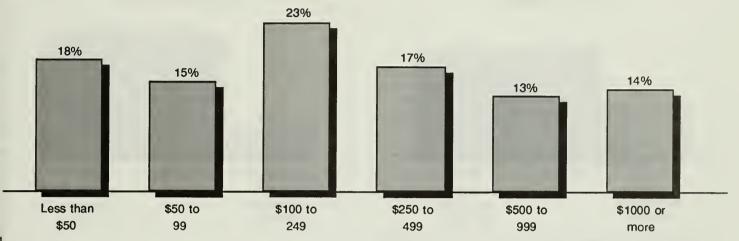
Demographic characteristic	Percentage who spent money	Demographic characteristic	Percentage who spent money
Total Sample	64	Family size	
Sex	0.	1	44
Male	73	2	61
Female	75 56	3	70
remale	30	4	73
Age		5 or more	68
16 to 24	70	D. et l	
25 to 39	78	Residence	F.7
40 to 59	65	SMSA <sup>1</sup> , center city	57
60 and older	37	SMSA, not center city	69
		Not SMSA	65
Race	48	Work hours per week	
White	67	0	53
Black	46	1 to 20	69
Other	60	21 to 39	76
Education		40	73
0 to 11 years	5	41 or more	79
12 to 15 years	48		
16 or more years	47	Activity participation	
·		No activities	5
Annual income (dollars)		1 to 5 activities	53
Less than 10,000	38	6 to 10 activities	81
10,000 to 14,999	52	11 to 15 activities	92
15,000 to 24,999	72	16 to 20 activities	96
25,000 to 49,999	78	Over 20 activities	99
50,000 or more	83	Region	
Marital status		Northeast	64
Single, never married	67	North Central.	64
	44	South	62
Single, formerly married	69	West	69
Married	09	west	09

<sup>&</sup>lt;sup>1</sup>Percentage of respondents aged 16 and older who answered "yes" to the question "Did you spend any money in the past 12 months on outdoor recreation?" <sup>2</sup>Standard Metropolitan Statistical Area.

#### FIGURE 12

## Money Spent for Outdoor Recreation During 12 Months Prior to Interview

(Percentage of Respondents Age 16 and Older Who Cited Different Expenditures<sup>1</sup>)

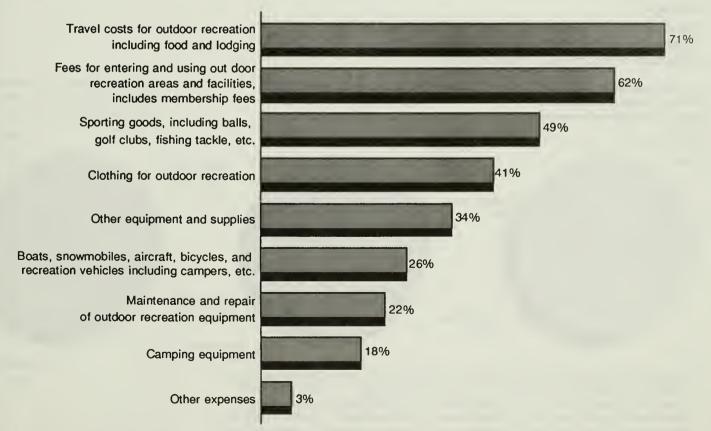


Percentages refer to the population of repondents age 16 or over who said they spent money for outdoor recreation in the 12 months prior to the interview (65% of the surveys respondents).

FIGURE 13

Purchases for Outdoor Recreation in Prior Year

(Percentage of Respondents 16 Years and Older Citing Each Purpose)



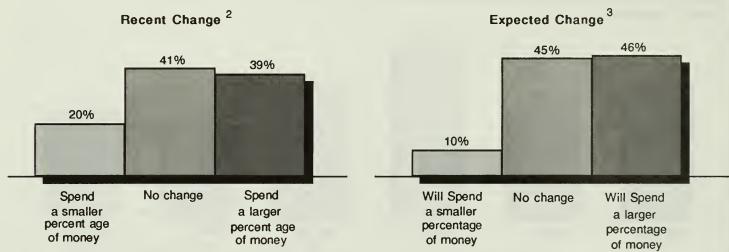
Percentages refer to the population of respondents age 16 or over who said they spent money for outdoor recreation in the 12 months prior to the interview (65% of the survey's respondents).

Respondents were asked to indicate all categories in which they spent money.

#### FIGURE 14

## Recent and Expected Changes in Money Spent on Outdoor Recreation

(Percentage of Respondents 16 Years and Older 1)



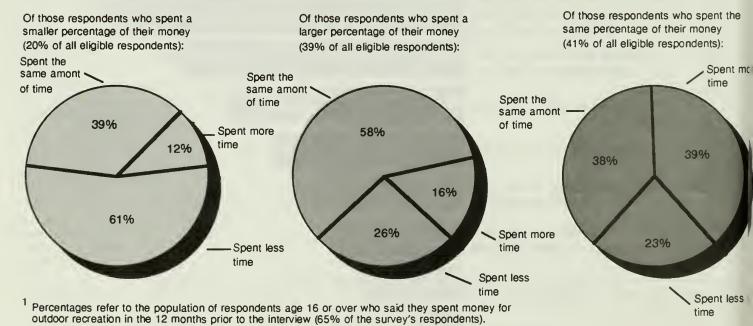
Percentages refer to the population of respondents age 16 or over who said they spent money for outdoor recreation in the 12 months prior to the interview (65% of the survey's respondents).

Expected change in percentage of respondent's available money which will be spent on outdoor receation during 2 years following invterview.

#### FIGURE 15

## Relationship of Recent Change in Time and Money Expenditures for Outdoor Recreation

(Percentage of Respondents 16 Years and Older 1)



"Changes" (or lack thereof) refer to the respondents' current estimated rate of time or money expenditure for outdoor recreation compared to what it was 2 years earlier. Eligible respondents were first divided into three categories (the three circles) based on whether their estimated rate of dollar expenditure (percentage of available dollars) had declined, stayed the same or risen. Each category was then further divided into three sectors based on the percentage of respondents within it whose estimated expenditure of time had declined, stayed the same or risen.

Reported change in percentage Of respondent's available money which was spent on outdoor recreation compared to 2 years prior to interview.

Table 27. Reason for Spending a Larger Percentage or a Smaller Percentage of Money on Outdoor Recreation

(Percentage of respondents)							
Reason for spending a larger percentage	Respondents citing reason <sup>1</sup>	Reason for spending a smaller percentage	Respondents citing reason <sup>1</sup>				
Lifestyle changes,includes doing more recreation activities	26	Lack of time and/or money available	38				
Time and/or money availability, includes		Lifestyle changes	23				
inflation	49	No need for or lack of equipment	21				
Equipment gain	11	Family responsibility	8				
Family	9	Work responsibility	6				
Work	3	Poor health	3				
Resource opportunity	2	Lack of resource opportunity	2				
Lanlib	1						

<sup>&</sup>lt;sup>1</sup>Age 16 and older.



CHAPTER 6

## Aging and Outdoor Recreation

As a result of modern technology, longer life expectancies and the maturing of the baby boom generation, there is now and will continue to be a higher proportion of individuals over 60 years than ever before in the history of the United States. This aging of the population has spawned increased interest in studying the leisure behavior of the elderly. The importance of leisure and recreation activities in the lives of older persons has become clear in recent years. Past research, using a life-cycle perspective, has examined numerous aspects of leisure behavior including such areas as activity involvement, participation in physical activities, and barriers to participation. These studies, however, have been inconsistent in their findings, indicating a need for further research in the leisure patterns of the elderly and how those leisure patterns have changed over time.1

The final series of questions in the NRS was sponsored by the Administration on Aging to further investigate the involvement of older Americans in outdoor recreation pursuits. The results, presented here, cover three broad areas.

The first section compares respondents aged 60 and older with respondents under 60 years with respect to a variety of leisure behaviors and perceptions. Included here are comparisons related to the average number of activities engaged in during the previous 12 months; the average annual number of activity-days of participation; recent and prospective changes in expenditures of time and money; the importance of having recreation areas at varying distances from home; and the importance of different easons why individuals: (1) enjoy an activity, (2) don't do an activity as often as they

would like, and (3) stop participating in an activity.

The second and third sections deal exclusively with respondents 60 years old and older. These sections examine participation in club-sponsored outdoor recreation activities, club memberships, outdoor recreation skills and interests, and the role of older Americans in transmitting those skills to others by teaching or coaching. The specific questions identify whether or not an individual participated in any recreational activities sponsored by clubs or organizations, the clubs sponsoring the activities, club memberships, skills the respondent has, which if any are actually being taught and to whom, and what the barriers are to teaching these skills.

#### COMPARISON OF RESPONDENTS 60 YEARS AND OLDER WITH THOSE UNDER 60

Table 28 summarizes the recreational involvements of respondents 60 years and older. When compared to respondents less than 60 years, as well as to the entire sample, in almost every instance, those respondents 60 years and older showed less involvement in outdoor recreation. Almost one-third (30 percent) of the older group reported no participation in outdoor recreation activities, compared to 7 percent of those under 60 years and 11 percent of the

Table 28. Involvement in Outdoor Recreation, by Age Groups

		age	
Indicators of involvement summarized over all activities	60 years and over	Less than 60 years	Total sample
Average number of activities participated in once or more in prior 12 months	2.9	8.2	7.2
Percentage of respondents indicating they participate in no outdoor recreation activities	30	7	11
Average number of activity days of participation in previous 12 months	12.4	42.9	37.1
Average number of days respondents used various recreation areas in previous 12 months:			
Yards and similar areas	5.4	7.6	7.2
Neighborhood parks, etc	2.5	5.1	4.6
Community or regional parks, etc	1.8	4.6	4.0
More distant parks	1.5	3.1	2.8
Average estimated expenditure for outdoor recreation in previous			
12 months (dollars)	391	350	355

<sup>&#</sup>x27;McGuire, F.A. and F.D. Dottavio. 1984. Outdoor acreation participation across the lifespan: Abandonnent, continuity, or liberation. Clemson University, Jemson, SC.

total sample. The findings presented in table 28 indicate that respondents 60 years old and older participated, on the average, in about 3 activities during the prior 12 months and logged a total of approximately 12 activity-days. Again, these figures are substantially less than those cited for respondents under 60 years and the total sample. The average number of activities engaged in for the two groups was 8.2 and 7.2, respectively, and the average number of days of participation reported was 42.9 and 37.1, respectively.

Similar patterns emerged when the respondents were asked to indicate how many days in the past 12 months they used recreation areas at various distances from home. While the average number of days of use, in all instances, decreased steadily from yards and similar areas through neighborhood and regional parks to more distant destinations, the more elderly group showed consistently lower averages (ranging from 5.4 days for yards to 1.5 days for more distant parks) than either those under 60 years (7.6 to 3.1 days) or the total sample (7.2 to 2.8 days). The final row in table 28 summarizes the respondents' estimates of how many dollars they spent altogether on outdoor recreation during the prior 12 months. Results here indicate that respondents 60 years and older were spending more money-an average of \$391-on outdoor recreation than those under 60 (\$350) and the total sample (\$355). This is the only index of involvement in outdoor recreation on which the respondents aged 60 and older exceeded the other age categories.

Table 29 details the percentages of respondents who gave selected reasons (from a list) why they enjoy their favorite activities. The reasons given were consistent across all age categories, the most frequent being "to enjoy nature and the outdoors" and "to get exercise or keep in shape."

Table 30 reports selected constraints to participation in respondents' favorite activities. The most frequently cited reason, in all cases, for not participating as often as an individual would like was lack of time. Almost one-third (30 percent) of those 60 years and older, twice as many under 60 (60 percent) and over half (56 percent) of the entire sample mentioned lack of time as a barrier to participation. The second most frequently cited constraint for the older group was personal health (22 percent) followed by not having anyone to do the activity with (14 percent). For those respondents under 60, as well as for the entire sample, the second and third most frequent constraints were "not enough money" and "no places to do the activity around here."

Table 31 identifies selected reasons why people have stopped participating in particular recreation activities. When respondents were asked to indicate whether or not during the prior 2 years, they had stopped participating in any outdoor recrea-

Table 29. Reasons for Enjoying Favorite Activities, by Age Groups

(Percentage of respondents who gave selected reasons why they enjoy their favorite activities')

	Α	ge		
Reason	60 years and over	Less than 60 years	Total sample	
Enjoy nature and outdoors.	72	68	68	
Get exercise or keep in shape	59	68	66	
For peace and quiet	46	47	47	
Get away from problems <sup>2</sup>	44	57	56	
To be with family or friends	35	55	53	
Like people who do activity	30	35	34	
Own and enjoy using equipment	23	27	27	
Enjoy solitude	21	26	25	
Something new or different	18	22	21	
Other reasons (not on list)	14	9	10	

<sup>&#</sup>x27;Percentages are based on the respondents who cited one or more activities they "particularly enjoyed."

Table 30. Constraints on Favorite Activities, by Age Groups (Percentage citing constraint<sup>1</sup>)

	A		
Reasons	60 years and over	Less than 60 years	Total sample
Not enough time.	30	60	56
Personal health reasons	22	6	8
No one to do activity with	14	18	17
Not enough money.	12	21	20
No place to do activity	11	20	19
Inadequate transportation or too far	10	15	14
Crowded activity areas	7	14	13
activity areas	4	5	5
Poorly maintained activity areas	3	6	5
Pollution problems in activity areas	2	4	4
Inadequate information on activity areas	1	5	5
Other reasons (not on list)	14	11	11

<sup>&#</sup>x27;Percentage of respondents who gave selected reasons why they do not do their favorite activities "as often as they would like". Percentages are based on those respondents who cited one or more activities they "particularly enjoyed."

tion activities that they used to do, only 16 percent of those 60 years and older said yes compared with 21 percent of those under 60. A followup question asked respondents who had stopped an activity why they stopped. The reasons given mirrored those found in table 30. Sixtyseven percent of the older respondents reported health-related reasons for stopping an activity followed by "no people to do the activity with" (12 percent). All other reasons listed for stopping an activity were cited by less than 10 percent of those respondents 60 years and older. Conversely, respondents

under 60 most frequently cited lack of time (39 percent) as the reason they quit an activity. For the nonelderly, health reasons (23 percent) and lack of people to do the activity with (21 percent) also played fairly substantial roles in their decisions to stop participating. For all groups, poor maintenance and pollution at the activity sites were the least frequently cited reasons for stopping an activity.

Several other questions in the NRS asked respondents to compare the time and money they currently spend on outdoor recreation to what they spent 2 years prior

<sup>2&</sup>quot;To get away from day-to-day living or problems."

Table 31. Reasons for Discontinuing a Recreation Activity, by Age Groups (Percentage citing reason')

	A	ge		
Reason	60 years and over	Less than 60 years	Total sample	
Personal health reasons.	67	23	33	
No one to do activity with	12	21	19	
Not enough time.	9	39	33	
No place to do activity around here	8	15	14	
far to travel.  Personal safety problems in	5	9	8	
activity areas	3	5	5	
Not enough money.	3	18	15	
Crowded activity areas	1	10	8	
Poorly maintained activity areas	(x)	4	3	
Pollution problems in activity areas	(x)	2	2	
activity areas	(x)	3	2	
Other reasons (not on list).	15	23	21	

x Less than one half of one percent.

Table 32. Changes in Time and Money Spent for Outdoor Recreation, by Age Groups

(Percentage of respondents1)

A	Age		
60 years and over	Less than 60 years	Total sample	
	0.4	10	
ŭ		18	
•		48	
34	33	33	
16	43	37	
65	51	53	
19	7	9	
00	4.0	00	
_,		39	
	-	41	
20	20	20	
27	48	46	
60	43	45	
12	9	10	
	60 years and over  8 58 34  16 65 19  29 51 20	8 21 58 46 34 33  16 43 65 51 19 7  29 41 51 39 20 20  27 48 60 43	

<sup>&#</sup>x27;Percentage of respondents who gave various estimates of past and future changes in expenditures of ime and money for outdoor recreation.

to the interview and to estimate how that time and money expenditure would change in the next 2 years. Table 32 compares the responses to each of these questions for individuals 60 years and older and those under 60 years. The largest numbers (58 percent of those 60 and older and 46 percent of those under 60) of individuals in both groups indicated they were spending about the same amount of time on outdoor recreation compared to 2 years ago. Over one-third in each group said they were spending less time while only 8 percent of those 60 and older and 21 percent of those under 60 reported spending more time on outdoor recreation than they did 2 years before.

Different results occurred when respondents were asked to project future outdoor recreation involvement. Again, the majority of individuals in both groups reported they would be spending about the same amount of time on outdoor recreation in 2 years. However, 19 percent of the more elderly respondents said they would spend less time compared to only 7 percent of those under 60. The reverse was true of the spending more time category with 43 percent of those under 60 and 16 percent of those 60 and over indicating increasing involvement over the next 2 years.

Results of the questions about the amount of money spent on outdoor recreation revealed that over half of the respondents 60 and older were spending about the same as they did 2 years before and expected to be spending about the same 2 years later. A little more than one-fourth (27 percent) of the aging respondents expected to be spending more in the future. Just the reverse was true for those under 60, the largest proportions of whom said they were spending more than 2 years earlier (41 percent) or expected to be spending a larger percentage of their money on outdoor recreation in the future (48 percent). Slightly fewer people cited no change in expenditure over the prior 2 years or expected to be spending the same proportion of their money on outdoor recreation in the future (39 and 43 percent, respectively).

#### CLUB ACTIVITY AND MEMBERSHIPS OF INDIVIDUALS 60 YEARS AND OLDER

Table 33 summarizes the recreational involvement of individuals 60 years and older in club-sponsored recreational activities. Specifically, respondents were asked to indicate whether or not they had participated in any outdoor recreation activities which were sponsored by a club or organization, the names of the organizations or clubs, and whether or not they held memberships in these clubs or organizations.

<sup>&</sup>lt;sup>1</sup>Percentage of respondents who gave selected reasons why they stopped doing a recreation activity.

NOTE: Percentages are based on those respondents who said they stopped an activity in the prior 2 years (19 percent of the total sample).

Table 33. Club-Sponsored Outdoor Recreation Activities by Respondents Aged 60 and Older

Type of club or organization		Type of club or organization	Percentage participating <sup>1</sup>
Senior citizen group	19	Union/employee organization Garden club Cultural organization	3 3 3
Sportsmen club		Ethnic organization	3 21

<sup>&</sup>lt;sup>1</sup>Percentages based on those respondents aged 60 and older who said they participated in one or more club sponsored outdoor recreation activities during the prior 12 months.

Table 34. Outdoor Recreation Skills and Teaching Activities of Respondents Aged 60 and Older

(Percentage of respondents)

Skill	Having skill	Teach- ing skill <sup>1</sup>	Skill	Having skill	Teach- ing skill¹
Total having or teaching			Hunting	14	20
any outdoor recreation			Camping	12	9
skill	16	24	Hiking	2	0
Bicycling	2	0	Birdwatching or other		
Horseback riding	1	0	nature study	6	3
Golf	12	19	Downhill skiing	2	7
Tennis	5	7	Frisbee-horseshoes	4	7
Team sports	12	19	Archery	1	4
Canoeing	1	0	Target shooting	3	6
Sailing	2	2	Training exhibit animals	2	3
Motor boating	6	6	Game skill	4	4
Swimming	13	9	Gardening	13	17
Fishing	25	29	Coaching, officiating	1	0

<sup>&</sup>lt;sup>1</sup>For each skill, the "actively teaching" percentage (second column) is based only on those respondents (first column) who claimed to have a teachable level of proficiency in that skill.

Table 35. Reasons for Not Teaching Outdoor Skills

(Cited by respondents aged 60 and older)

Reasons	Percent- age	Reasons	Percent- age
Have not been asked	44	No teaching abilities/uncomfortable	
Not enough time	35	teaching	10
Not interested	28	No equipment or supplies	6
Personal health reasons	21	No transportation	2
No contact with organizations	14	Other reasons (not on list)	13

NOTE: Percentages are based on those respondents who indicated having one or more teachable skills.

Results indicated that only 13 percent of those respondents aged 60 and older had taken part in any outdoor recreation activities sponsored by a club or organization during the last 12 months. Twenty-two percent of these individuals cited senior citizen groups as the sponsoring organization. Nearly one-fifth (19 percent) cited church groups and only about 1 out of 10 indi-

viduals indicated participating in country club- and sportsmen's club-sponsored activities. Other groups cited included fraternal, charitable, union/employee, cultural, and ethnic organizations, as well as garden clubs. More than half of the participants in club-sponsored outdoor activities were members of the sponsoring group.

#### OUTDOOR RECREATION INTERESTS AND SKILLS OF INDIVIDUALS 60 YEARS AND OLDER

This section of the survey looks exclusively at respondents 60 years and olderwhat skills they have, which skills they teach and to whom, and what keeps the nonteachers from teaching. To examine these questions, respondents were first asked if they had any outdoor recreation skill or interest which they thought they could help others learn or practice. The 16 percent who responded yes to that question were then asked to list those skills (up to three). An additional question asked the same individuals if they were currently teaching those skills to others. Nearly one-quarter (24 percent) indicated that they were actually teaching their skills to others.

Table 34 combines all this information and compares which skills individuals say they have and which of those skills they were actually teaching at the time of the interview. The teachable skills most frequently cited by respondents 60 years old and older were fishing (25 percent); hunting (14 percent); swimming and gardening (13 percent each); and golf, camping, and team sports (12 percent each). The second column shows the percentage of those respondents citing each skill who said they were actually teaching at the time of the interview. As was true of the first column, fishing and hunting led the list. Twenty-nine percent of the fishermen and 20 percent of the hunters reported actually teaching their sport. Nearly one-fifth of the repondents having golf, team sport, and gardening skills said they were actively teaching.

Most were teaching skills to family or friends (56 percent and 46 percent, respectively). Nearly one-quarter of those teaching were teaching members of various organizations, while only 12 percent reported teaching other persons.

The final table in this section (table 35) lists selected reasons why people don't teach the skills they have. Specifically, respondents were asked to indicate, by choosing reasons from a list, why they don't teach the recreation skills or interests they have. From the results reported here, it appears that the primary reason is that they haven't been asked (44 percent). Over one-third cited lack of time (35 percent) while over one-quarter (28 percent) were simply not interested in teaching. Only 10 percent indicated that they didn't know how to teach or wouldn't feel comfortable teaching.

#### **SUMMARY**

In general, respondents 60 years and older can be characterized as much less active than those under 60 years. During the 12 months prior to the interview, they par-

ticipated on the average in three activities for approximately 12 activity-days and spent almost 400 dollars. They typically cited enjoyment of nature as the reason for enjoying their favorite activities; not enough time as their reason for not doing their favorite activities as often as they would like; and personal health as the reason for discontinuing a recreational activity. Respondents 60 years

and over were spending about the same amount of time and money as they had in the 2 years prior to the survey and predicted this to be the case in the future. Overall, few individuals reported participating in club-sponsored activities. Of those that did, however, it was primarily with senior citizen or church groups of which they were members. Lastly, results indicated that the

role of senior citizens in teaching outdoor recreation skills seems to be centered around hunting, fishing, golfing, gardening, and team sports—most of which were being taught to friends and family. The primary reason cited by respondents for not teaching skills to others was never being asked.



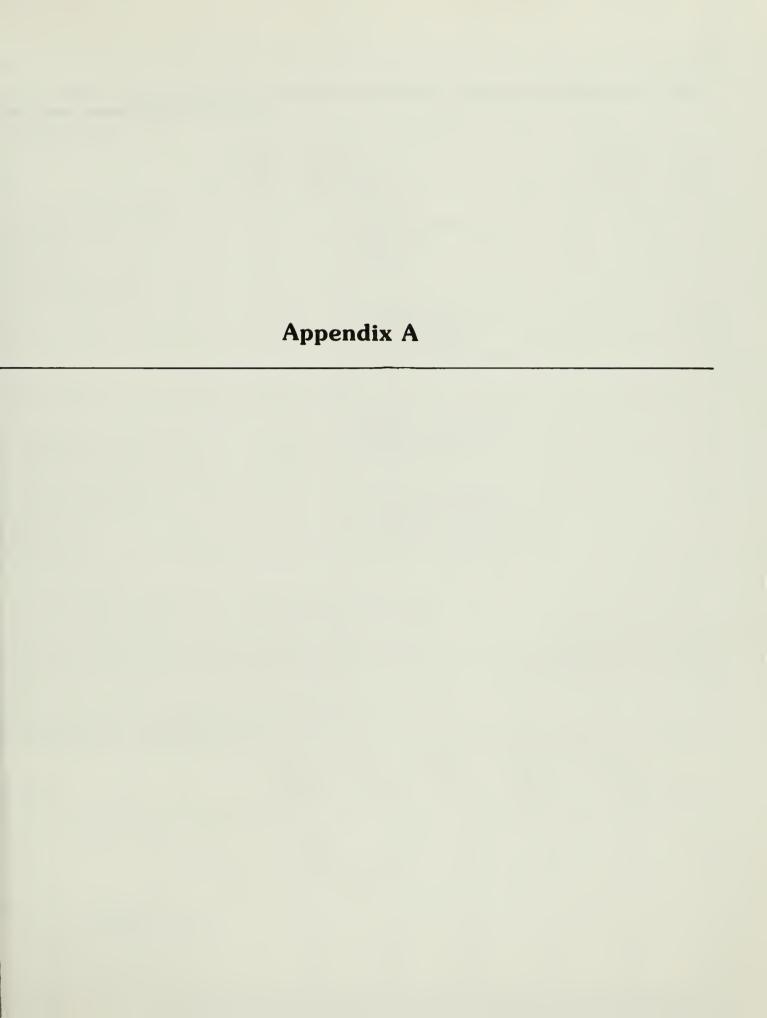


Table A-1. Outdoor Recreation Activities not Listed on Questionnaire or Information Card Booklet, by Annual Participation Rate and Choice as Favorites

(Percentage of total sample)

Activity	Annual participation rate <sup>1</sup>	Chose activity as favorite <sup>2</sup>	Activity	Annual participation rate <sup>1</sup>	Chose activity as favorite <sup>2</sup>
Attend miscellaneous events not listed	.2	.1	Sunbathing	(x)	.5
Hang gliding, parachuting and other			Skin diving, snorkeling, scuba diving	.2	.2
aircraft activities	.2	.2	Rafting, tubing	. (x)	.1
Orienteering	.0	.0	Surfing	.1	.2
Mountain climbing, rock climbing			Windsurfing	.0	.0
and caving	.1	.2			
Gathering and collecting activities	.1	.1			
			Gardening/yard work	.8	4.2
Baseball	.1	5.2	Enjoying/being in yard/at home	(x)	.1
Softball	.1	5.5	Enjoying the outdoors	.1	.1
Football	.1	4.1	Going to/enjoying parks	.1	.9
Basketball	.1	4.6	Going to/enjoying the cabin, summer		
Soccer	.1	1.5	place, etc	.0	.0
Ice hockey	(x)	.2			
Volleyball	.1	2.1	T 1	0	0
Other team sports	.1	.5	Traveling	.0	.0
D. 1. 4.	•	0	Other enjoying places/environments	.2	.1
Badminton	.1	.8	Relaxing	(x)	.0
Frisbee-horseshoes	.3	1.1	Fitness/exercise activities not		
Tag, hide-and-seek, other children's games	(x)	.1	elsewhere classified	(x)	.1
Archery	.0	.1			
Target shooting	.1	.4	1		
Raising/training/exhibiting animals	.1	.2	Coaching, officiating, instructing	(x)	.2
Roller skating, skateboarding	.1	.5	Motorcycling, motorbiking (on road or		
Unclassified skating	.0	.2	nonspecific), and all motor vehicle racing	.1	1.1
Unclassified games-sports	.(x)	.4	Miscellaneous outdoor recreation activities		
Other games-sports	.2	.7	not elsewhere classified	.3	.8

x Less than 0.05 percent.

 Table A-2. Preferences for Allocating National Park Operating Costs

(Percentage choosing each of five cost breakdowns1)

Respondent characteristic	All from visitor, nothing from taxes	3/4 (\$3.75) from visitor, rest from taxes	1/2 (\$2.50) from visitor, rest from taxes	1/4 (1.25) from visitor, rest from taxes	Nothing from visitor, all from taxes	No opinion
Number of national parks ever visited						
None	25	14	26	7	8	21
1 to 4	31	17	32	8	6	7
5 to 9	34	21	33	6	3	3
10 or more	31	21	35	7	5	3
Likelihood of visiting a national park						
Very likely in next 12 months	29	20	33	8	6	4
in the next 3 years	27	22	36	8	3	3
Somewhat likely in the next 3 years	30	21	33	6	6	4
Not very likely in the next 3 years	28	8	24	6	9	25
Fotal sample	28	16	30	7	7	12

<sup>&</sup>lt;sup>1</sup>Percentage of respondents aged 16 or older who preferred each of five allocations of an assumed five dollar per visit operating cost between visitor charges and taxes.

<sup>&</sup>lt;sup>1</sup>Percentage who said they participated once or more during the prior 12 months. As many as four unlisted activities per respondent were recorded. <sup>2</sup>Respondents were asked to name up to three activities that they "particularly enjoyed doing."

NOTE: Apparent discrepancies between the two columns result from question-order. The example of baseball will illustrate. Before the activity list was introduced, respondents were asked to name the activities they "particularly enjoyed doing." Baseball was cited by 5.2 percent of them. After extensive exposure to the list, the respondents were asked to name any other outdoor recreation activities they had taken part in during the prior 12 months. Few (0.1 percent) named baseball since they had already cited any baseball participation under "outdoor team sports."

Table A-3. Respondent Views on Operating Costs of National Park Campgrounds

(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of operating national park campgrounds)

Respondent characteristic	Visitor fees	Taxes	Visitor fees and taxes	No opinion and other
Number of national parks				
ever visited				
None	38	25	22	15
1 to 4	47	20	30	3
5 to 9	53	17	29	1
10 or more	51	19	28	1
Likelihood of visiting a national park				
Very likely in next 12 months	49	22	<b>2</b> 8	2
Less likely in next 12 months but very likely in next 3 years	49	22	27	2
Somewhat likely in next 3 years	46	23	29	2
Not very likely in next 3 years	39	20	23	18
Total sample	44	22	26	8

<sup>&#</sup>x27;Includes approximately one percent who offered the view that campgrounds should not be provided in national parks.

Table A-4. Respondent Views on How to Cover Costs of Special Talks and Exhibits in National Parks

(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of special talks and exhibits in national parks)

Respondent characteristic	Visitor fees	Taxes	Visitor fees and taxes	No opinion and other
		·	<del></del>	
Number of national parks ever visited				
None	39	25	19	17
1 to 4	45	26	23	6
5 to 9	44	29	24	3
10 or more	38	34	26	2
Likelihood of visiting a national park				
Very likely in next 12 months	46	<b>2</b> 8	23	3
Less likely in next 12 months but very likely in next 3 years	41	31	25	3
Somewhat likely in next 3 years	45	30	22	4
Not very likely in next 3 years	37	23	19	21
Total sample	41	27	22	10

<sup>&#</sup>x27;Includes approximately one percent who offered the view that special talks and exhibits should not be provided in national parks.

### Table A-5. Respondent Views on How to Cover Costs of Reservation Systems in National Parks

(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of operating advance reservation systems for camping and other activities in national parks)

Respondent characteristic	Visitor fees	Taxes	Visitor fees and taxes	No opinion and other <sup>1</sup>
Number of national parks ever visited				
None	42	22	19	17
1 to 4	55	18	22	5
5 to 9	58	18	20	3
10 or more	58	16	21	5
Likelihood of visiting a national park				
Very likely in next 12 months	58	20	19	4
Less likely in next 12 months but very likely in next 3 years	56	19	22	3
Somewhat likely in next 3 years	49	24	23	4
Not very likely in next 3 years	44	17	18	21
Total sample	50	20	20	10

Includes approximately one percent who offered the view that advance reservation systems for camping and other activities should not be provided in national parks.

## Table A-6. Respondent Views on How to Cover Costs of Rides on Buses or Other Ways of Getting Around in National Parks

(Percentage of respondents aged 16 or older who preferred each of three ways of allocating the costs of buses and other public transportation systems)

Respondent	Visitor fees	Taxes	Visitor fees and taxes	No opinion and other
Number of national parks ever visited				
None	54	16	15	15
1 to 4	65	14	18	4
5 to 9	67	12	18	3
10 or more	69	13	17	2
Likelihood of visiting a national park				
Very likely in next 12 months	66	15	18	2
Less likely in next 12 months but very likely in next 3 years	65	14	18	2
Somewhat likely in next 3 years	64	16	18	3
Not very likely in next 3 years	55	13	14	18
Total sample	61	14	17	9

<sup>&#</sup>x27;Includes approximately one percent who offered the view that rides on buses or other ways of getting around the park should not be provided.

Table A-7. Preference Rankings for "Turning People Away Who Come After a Limit of People are in Park" to Reduce Overcrowding in National Parks

(Percentage of respondents 16 years old or older selecting each ranking)

Respondent characteristic	First choice	Second choice	Third choice	Fourth choice	Unac- ceptable	No opinion
Number of national parks ever visited						
None	7	11	27	34	17	1
	7		27	٠.		4
1 to 4		14	31	41	6	1
5 to 9	7	16	28	42	7	1
10 or more	7	15	36	36	6	(x)
Likelihood of visiting a national park						
Very likely in next 12 months	8	15	29	40	6	(x)
Less likely in next 12 months but very	_					(^/
likely in next 3 years	5	14	34	42	_	1
	5				5	1
Somewhat likely in next 3 years	7	13	32	41	6	1
Not very likely in next 3 years	7	11	<b>2</b> 6	34	20	3
Total sample	7	13	29	38	11	2

x less than one half of one percent.

Table A-8. Preference Rankings for "Letting People Apply in Advance Then Drawing Names" to Allocate Reservations as a Means of Reducing Overcrowding in National Parks

(Percentage of respondents 16 years old or older selecting each ranking)

Respondent characteristic	First choice	Second choice	Third choice	Fourth choice	Unac- ceptable	No opinion
Number of national parks ever visited						
None	11	38	21	10	16	4
1 to 4	11	47	<b>2</b> 3	12	6	1
5 to 9	9	42	29	14	6	х
10 or more	12	43	24	14	7	1
Likelihood of visiting a national park						
Very likely in next 12 months	11	40	30	13	6	(x)
likely in next 3 years	9	48	24	13	5	1
Somewhat likely in next 3 years	11	48	22	12	6	1
Not very likely in next 3 years	11	37	21	9	19	3
Total sample	11	42	23	12	11	2

x Less than one half of one percent.

Table A-9. Preference Rankings for "Taking Reservations on a First-Come, First-Serve Basis" to Reduce Overcrowding in National Parks

(Percentage of respondents 16 years old or older selecting each ranking)

Respondent characteristic	First choice	Second choice	Third choice	Fourth choice	Unac- ceptable	No opinion
Number of national parks ever visited						
None	58	16	6	2	15	4
1 to 4	72	18	4	1	4	1
5 to 9	71	19	4	1	4	1
10 or more	71	19	4	1	4	1
Likelihood of visiting a national park						
Very likely in next 12 months	68	22	5	1	4	(x)
Less likely in next next 12 months but very						
likely in next 3 years	77	15	4	1	3	1
Somewhat likely in next 3 years	71	17	5	2	5	1
Not very likely in next 3 years	56	18	5	1	17	3
Total sample	65	18	5	1	9	2

x Less than one half of one percent.

Table A-10. Preference Rankings for "Charging an Extra 5 Dollars Per Adult Visitor" to Reduce Overcrowding in National Parks

(Percentage of respondents 16 years old or older selecting each ranking)

Respondent characteristic	First choice	Second choice	Third choice	Fourth choice	Unac- ceptable	No opinion
Number of national parks ever visited						
None	6	15	26	33	17	4
1 to 4	7	15	33	38	7	1
5 to 9	9	16	31	36	7	1
10 or more	7	17	28	39	8	2
Likelihood of visiting a national park						
Very likely in next 12 months	8	17	30	38	6	1
Less likely in next 12 months but very						
likely in next 3 years	6	18	33	38	5	1
Somewhat likely in next 3 years	6	16	33	37	6	1
Not very likely in next 3 years	6	13	25	32	20	4
Total sample	7	15	29	36	11	2

Table A-11. Time Expenditure Changes for Outdoor Recreation: Present Compared With 2 Years Earlier

(Percentage of respondents age 16 and older)

Demographic	Spending	Spending	Spending	Demographic	Spending	Spending	Spending
characteristic	more time	less time	same time	characteristic	more time	less time	same time
Total sample	18	33	48	Family size			
Total sample	10	33	40	1	12	34	54
Sex				2	16	33	52
Male	19	33	48	3	19	37	45
Female	18	34	49	4	22	33	45
A				5 or more	23	31	46
Age 16 to 24	25 <sup>-</sup>	37	39	Residence			
25 to 39	24	34	42	SMSA <sup>1</sup> , center city	18	34	48
40 to 59	14	31	56	SMSA, not center city	20	33	47
60 or more	8	34	58	Not SMSA	16	33	50
Race				Work hours per week			
White	19	33	49	0	18	32	50
Black	15	37	48	1 to 20	25	27	48
Other	25	40	36	21 to 39	18	37	46
Education				40	18	33	49
0 to 11 years	5	32	63	41 or more	19	35	45
12 to 15 years	18	35	48	Activity participation			
16 or more years	23	33	44	No activities	1	29	70
Annual income (dollars)				1 to 5 activities	12	37	51
Less than 10.000	13	37	50	6 to 10 activities	22	36	43
10,000 to 14,999	15	37	48	11 to 15 activities	27	29	43
15,000 to 24,999	19	33	48	16 to 20 activities	41	22	36
25,000 to 49,999	24	29	47	Over 20 activities	46	15	40
50,000 or more	28	24	49	Region			
Marital status				Northeast	19	31	48
Single, never married	24	33	43	North Central	19	30	50
Single, formerly married	13	36	52	South	15	36	47
Married	18	33	49	West	21	34	45

<sup>&</sup>lt;sup>1</sup>Standard Metropolitan Statistical Area.

Table A-12. Estimated Time Expenditure Changes in Outdoor Recreation For Next 2 Years

(Percentage of respondents 16 years or older)

36 38 40 49 36 16	9 9 9 12 4 6	53 54 52 48	Family size  1	23 32 43 46 41	16 10 7 7 8	61 58 50 47 51
36 38 40 49 36	9 9 12 4	54 52 48	1	32 43 46	10 7 7	58 50 47
38 40 49 36	9 12 4	52 48	2	32 43 46	10 7 7	58 50 47
38 40 49 36	9 12 4	52 48	3	43 46	7	50 47
38 40 49 36	9 12 4	52 48	4	46	7	47
40 49 36	12 4	48	5 or more			
49 36	4		Residence			
49 36	4		Residence			
36	•					
	6	46	SMSA <sup>1</sup> , center city	39	9	51
16	_	58	SMSA, not center city	40	9	52
	19	65	Not SMSA	33	10	57
			Work hours per week			
38	9	54	0	30	13	57
36	12	52	1 to 20	44	12	44
44	13	43	21 to 39	43	6	51
			40	42	5	53
14	16	70	41 or more	45	6	49
43	′	40				75
						57
25	16	59			_	47
35	11	54			_	44
40	7	52				51
45	7	48	Over 20 activities	47	8	45
44	3	53	Pagion			
			9	33	10	50
38	11	50				51
						51
					_	48
	14 36 45 25 35 40 45	14 16 36 10 45 7 25 16 35 11 40 7 45 7 44 3	14 16 70 36 10 54 45 7 48 25 16 59 35 11 54 40 7 52 45 7 48 44 3 53 38 11 50 30 14 57	14	14	14

<sup>&</sup>lt;sup>1</sup>Standard Metropolitan Statistical Area.

Table A-13. Reasons For Spending More Time in Outdoor Recreation

(Percentage of respondents 16 years and older citing each reason)

Reasons <sup>2</sup>	Spending more time compared to 2 years prior to survey	Will spend more time 2 years after survey	Reasons <sup>2</sup>	Spending more time compared to 2 years prior to survey	Will spend more time 2 years after survey
Work/school-related changes	13.1	16.4	Health-related changes	. 7.0	8.4
Working more/less	2.9	4.6	Good/better health	9	2.7
Getting/having a job	4	.9	Poor/worse health	2	.0
Unemployed	2.7	.9	To improve health	. 4.5	3.5
Retired	4.0	5.5	To reduce stress	. 1.1	1.8
Entering/in school	.3	.2	Other health changes	3	.4
Leaving school	1.6	2.8	Equipment/transportation-related		
Other work/school changes	1.2	1.5	changes	. 6.3	2.4
			Have more equipment		1.6
Family-related changes	. 18.0	25.9	Have less equipment		0.
Family responsibilities		.9	Gain automobile		.4
Marriage		.8	Gain other transportation		.1
Loss of spouse		.2	Other equipment/transportation		.1
Child care responsibilities		.6	changes		.3
Increasing age of children		19.7			
No children at home		1.2	Resource access-related changes		2.1
Spouse's schedule	7	1.1	Gain of a yard		.2
Dependent's health	.0	.4	More opportunity		.4
Other family changes		1.0	Resource characteristics		.1
, s			Gain park access		.2
Lifestyle-related changes	. 29.3	19.7	Gain second home		.1
Getting older/aging		.9	Other resource access changes	. 3.1	1.1
		2.2	Money/time-related changes	. 20.1	24.8
Doing more		1.8	More/enough income		5.1
Moving		1.2	Less/insufficient income		.2
		2.0	Inflation	3	.2
Gain companion		7.6	More/enough time	. 13.4	10.2
Like specific activity Competition with nonrecreation		7.0	Less/insufficient time		.1
activities	_	1.1	Schedule more time		8.7
		1.1	Other money/time changes		.3
Change in recreation behavior Other lifestyle changes		1.8	Don't know		.5

<sup>116</sup> years and older.

<sup>&</sup>lt;sup>2</sup>Codes were developed from responses to open-ended questions number 6b and 6d.

Table A-14. Reasons for Spending Less Time for Outdoor Recreation

(Percentage of respondents 16 years and older citing each reason)

Reasons <sup>1</sup>	Spending less time compared to 2 years prior to survey	Will spend less time 2 years after survey	Reasons¹	Spending less time compared to 2 years prior to survey	Will spend less time 2 years after survey
Work/school-related changes	. 26.0	24.8	II bi a a a		
Working more/less		4.6	Health-related changes	13.1	18.3
Getting/having a job		10.9	Poor/worse health		8.8
Unemployed			Other health changes	5.7	9.5
Retired		.0	F		
Entering/in school		.0	Equipment/transportation-		
Leaving school		4.6	related changes		1.5
Working and in school		.5	Have less equipment	.3	.2
Other school/work changes	. 1.8	3.7	Poor equipment condition	.1	.0
		.5	Loss of automobile		.1
Family-related changes	. 13.9	7.8	Loss of other transportation	.4	.3
Family responsibilities	. 1.3	.2	Other equipment/transportation		
Marriage		.9	changes	1.1	.9
Loss of spouse	.6	.3			
Child care responsibilities		2.3	Resource access-related changes .	3.2	2.1
Increasing age of children		.8	Loss of a yard	.1	.0
No children at home		.6	Less opportunity	.5	.2
Spouse's schedule		.1	Resource characteristics		.7
Dependent's health		2.0	Resource restraints		.7
Other family changes	.3	.6	Loss of park access	.1	.0
Lifestyle-related changes	177.6		Other resource/access changes	1.3	.5
Getting older/aging	17.6	32.0			
Doing less		21.3	Money/time-related changes	22.6	12.8
Moving		.6	Less/insufficient money	4.8	2.9
Travel	.8	.9	Inflation	1.8	2.9
Loss of companion		.0	Competing demands for money	.1	.9
		.9	More/enough time	.2	.0
Dislike specific activity	2.1	3.5	Less/insufficient time	15.4	5.6
Competition with nonrecreation			Schedule less time	.2	.0
activities		3.4	Other money/time changes	.1	.5
Change in recreation behavior .		.8			
Other lifestyle changes	1.1	.6	Don't know	.9	.9

<sup>&</sup>lt;sup>1</sup>Codes were developed from responses to open-ended questions number 6b and 6d.

Table A-15. Reasons Given for Spending a Smaller Percentage of Income for Outdoor Recreation

(Percentage of respondents citing each reason1)

Reason <sup>2</sup>	Spending smaller percentage of income compared to 2 yrs. prior survey	Will spend smaller percentage of income 2 years after survey	Reason <sup>2</sup>	Spending smaller percentage of income compared to 2 yrs. prior survey	Will spend smaller percentage of income 2 years after survey
Work/school-related changes	5.3	6.9	Health-related changes	4.3	1.8
Working more/less	1.9	.5	Good/better health	.1	.2
Getting/having a job	.8	1.6	Poor/worse health	2.6	1.1
Unemployed	1.8	.7	Other health changes	1.7	.5
Retired	.0	.9			
Entering/in school	.4	2.9	Equipment/transportation-related	8.8	00.5
Leaving school	.0	.3	changes	8.8	33.5
Working and in school	.1	.0		.b 6.7	.7
Other work/school changes	.3	.0	Have less equipment  Poor equipment condition	.7	30.1
			Loss of automobile	.1	.9
Family related aboves	7.8	7.5	Loss of other transportation	.2	.6
Family-related changes	1.1		Other equipment/transportation	.2	.0
Family responsibilities		.2 .5	changes	.5	1.2
Marriage	.8	.5			
Child care responsibilities	3.4	1.7	Resource access-related changes .	3.5	.9
Increasing age of children	.6	.9	Loss of a yard	.5	.0
No children at home	.0	3.0	Less opportunity	.9	.0
Spouse's schedule		.2	Resource restraints	.2	.0
Dependent's health	.7	.5	Loss of park access	.2	.0
Other family changes	.2	.0	Loss of second home	.3	.2
Other family changes	.2	.0	Other resource access changes .	1.4	.7
			Money/time-related changes	45.0	28.7
Lifestyle-related changes	24.6	20.4	More/enough income	3.8	5.2
Getting older/aging	.5	5.0	Less/insufficient income	14.9	4.7
Doing less	16.0	9.4	Inflation	8.3	9.1
Moving	.7	.3	More competing demands for		
Travel	3.2	2.1	money	1.2	2.0
Loss of companion		.0	Less competing demands for		
Dislike specific activity	.2	.4	money	1.3	1.4
Competition with nonrecreation			Less/insufficient time	13.7	3.7
activities	1.4	.7	Schedule less time	.1	.4
Change in recreation behavior .	1.9	1.6	Other time/money changes	1.7	2.2
Other lifestyle changes	.0	.8	Don't know	.5	.0

<sup>&</sup>lt;sup>1</sup>Percentage of respondents 16 years and older who said they spent money on outdoor recreation in 12 months prior to their interview.

<sup>&</sup>lt;sup>2</sup>Codes were developed from responses to open-ended questions number 6j and 6l.

Table A-16. Reasons Given for Spending a Larger Percentage of Income on Outdoor Recreation

(Percentage of respondents 16 years and older who said they spent money for outdoor recreation in the 12 months prior to their interview)

Reasons <sup>1</sup>	percentage of income compared to 2 years prior to survey	Will spend a larger percentage of in- come 2 years after survey	Reason¹		Will spend a larger percentage of in- come 2 years after survey
Work/school-related changes	. 2.2	3.6	Health-related changes—cont.		
Working more/less		.3	riealti-related changes—cont.		
Getting/having a job		1.0	To improve health	0	.1
Unemployed		.0	To reduce stress		.1
Retired		1.4	Other health changes		.2
Entering/in school	•	.1	Other Health Changes	1	.2
	•	.7	Equipment/transportation-related		
Leaving school Other work/school changes		.1	changes	. 15.2	6.8
Other work/school changes		.1	Have more equipment		5.4
F 9	. 5.7	10.9			.0
Family-related changes			Have less equipment		
Family responsibilities		.2	Poor equipment condition		.3
Marriage		.4	Gain automobile	· · ·	.1
Loss of spouse		.0	Gain other transportation		.1
Child care responsibilities		.1	Other equipment/transportation		_
Increasing age of children		8.5	changes	. 3.1	.9
No children at home		.4	Resource access-related changes	. 2.2	1.1
Spouse's schedule		.5	Gain of a yard		.0
Dependent's health		.2	More opportunity		.1
Other family changes	6	.6	Resource restraints		.3
					.s .7
Lifestyle-related changes	. 23.6	28.4	Other resource access changes	. 1.0	.7
Getting older/aging	9	.3	Money/time-related changes	. 49.8	47.7
Doing more	. 11.7	18.9	More/enough income		6.4
Moving	4	.3	Less/insufficient income		.0
Travel	. 4.6	4.6	Inflation		31.4
Gain companion	3	.5	More competing demands for		01.1
Like specific activity	. 1.2	.9	money	1	.0
Competition with non-			Less competing demands for		.0
recreation activities	3	.4	money	1	.7
Change in recreation behavior	. 4.2	2.3	More/enough time		6.3
Other lifestyle changes		.2	Less/insufficient time		0.9
3		· ·	Schedule more time		2.6
Health-related changes	8	1.4	Other money/time-related		2.0
Good/better health		1.0		1.4	.3
Poor/worse health		.0	changes Don't know		.3

<sup>&</sup>lt;sup>1</sup>Codes were developed from responses to open-ended questions number 6j and 6l.

Table A-17. Present Money Expenditures for Outdoor Recreation Compared With 2 Years Prior to Interview

(Percentage of respondents 16 years and older who had spent money on outdoor recreation in past year)

Demographic characteristic	Spending larger percentage	Spending smaller percentage	Spending same percentage	Demographic Characteristic	Spending larger percentage	Spending smaller percentage	Spending same percentage
	00	00	41				
Total sample	39	20	41	Family size	26	00	40
Sex				2	36 39	22 18	43 43
Male	40	20	40	3	37	21	43
Female	39	20	42	4	39	20	41
1 emale	0)	20		5 or more	46	19	36
Age					10	17	00
16 to 24	50	18	32	Residence			
25 to 39	41	21	38	SMSA <sup>1</sup> , center city	39	19	42
40 to 59	33	19	48	SMSA, not center city	40	21	39
60 or more	29	20	51	Not SMSA	39	19	42
Race				Work hours per week			
White	40	20	41	0	38	20	42
Black	37	16	48	1 to 20	44	13	43
Other	49	21	30	21 to 39	41	18	41
Education				40	40	20	41
0 to 11 years	35	14	51	41 or more	39	24	37
12 to 15 years	40	20	40				
16 or more years	40	20	40	Activity participation		4.0	
·				No activities	32	19	49
Annual income (dollars)	0.7	0.1		1 to 5 activities	30	22	48
Less than 10,000	37	21	43	6 to 10 activities	39	19	42
10,000 to 14,999	37	21	42	11 to 15 activities	42 55	20 20	38 25
15,000 to 24,999	38	19	43	Over 20 activities	64	12	25 24
25,000 to 49,999	45	18	37	Over 20 activities	04	12	24
50,000 or more	37	19	44	Region			
Marital status				Northeast	40	17	41
Single, never married	48	16	36	North central	41	20	38
Single, formerly married	35	20	44	South	39	19	41
Married	37	21	42	West	36	22	41

<sup>&</sup>lt;sup>1</sup>Standard Metropolitan Statistical Area.

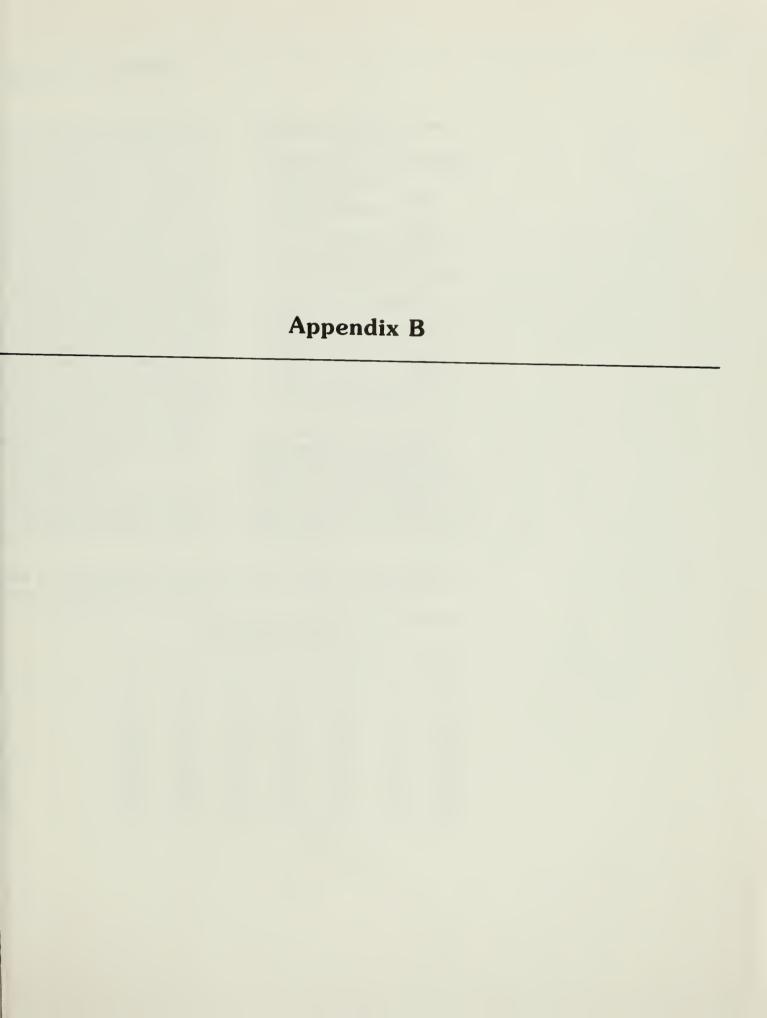
Table A-18. Estimated Changes in Money Expenditures for Outdoor Recreation During Next 2 Years

(Percentage of respondents 16 years and older who had spent money on outdoor recreation in past year)

Demographic characteristic	Will spend larger percentage	Will spend smaller percentage	Will spend same percentage	Demographic characteristic	Will spend larger percentage	Will spend smaller percentage	Will spend same percentage
Total sample	46	10	45	Family size		·	
Sex				1	38	15	47
Male	44	10		2	39	11	50
Female	44	10	46	3	47	9	45
Temale	47	9	44	4	51	9	41
Age				5 or more	52	7	41
16 to 24	53	10	37	Residence			
25 to 39	50	9	41	SMSA¹, center city	52	0	40
40 to 59	41	8	51	SMSA, not center city	46	8	40
60 or more	27	12	60	Not SMSA	40	10	44
Race				Work hours per week	41	10	49
White	44	10	46	0	43	10	47
Black	58	9	33	1 to 20	5l	10	47
Other	53	10	37	21 to 39	48	11	40 41
	00	10	37	40	46	8	41
Education				41 or more	46	9	45
0 to 11 years	32	9	59				45
12 to 15 years	46	10	44	Activity participation			
16 or more years	47	9	45	No activities	28	12	61
Annual income (dollars)				1 to 5 activities	39	10	52
Less than 10,000	45	12	43	6 to 10 activities	47	9	44
10,000 to 14,999	40	11	49	11 to 15 activities	51	9	40
15,000 to 24,999	48	9	43	16 to 20 activities	50	13	37
25,000 to 49,999	47	10	44	Over 20 activities	39	19	42
50,000 or more	40	6	54				12
farital status				Region			
Single, never married	52	10	0.0	Northeast	42	8	44
Single, formerly married		10	38	North Central	44	10	42
Married	41 44	12	47	South	44	9	42
	44	9	47	West	44	9	44

<sup>&</sup>lt;sup>1</sup>Standard Metropolitan Statistical Area.





# APPENDIX B. SAMPLING ERROR

The usual measure of sampling error is called the standard error. Table B-1 lists the theoretical standard errors, that is, the standard errors for simple random samples of various sizes encountered in the NRS. A percentage estimated from such a sample is expected to be within one standard error of the true population value two times out of three. It is expected to be within 1.96 standard errors of the true value 19 times out of 20. This is referred to as a 95-percent confidence interval. It clearly depicts the degree of precision of the estimated percentage.

The NRS sample was not a simple random sample but a multistage cluster sample. The sampling method is described in detail in the Methodological Report. This type of sample is generally less precise than a simple random sample of the same size, so the theoretical standard error is multiplied by a factor known as the design effect in order to estimate the standard error actually achieved in the survey. Design effects for 10 of the estimated percentages in the NRS were derived by a method called half sample analysis and are described in the Methodological Report.

Two 95-percent confidence intervals are computed here as examples. They represent the worst case (largest standard error—i.e., pool swimming) and the best case (smallest standard error—i.e., playing tennis) of the

trial standard errors based on the entire sample of 5,757 respondents.

Percentage who said they went swimming in an outdoor pool 43% Theoretical standard error (from table B-1) 0.65% Multiplied by observed design effect x 1.10

Observed standard error 0.72%

95-percent confidence interval =  $43\% \pm (1.96 \times 0.72)$  or  $43\% \pm 1.4\%$ 

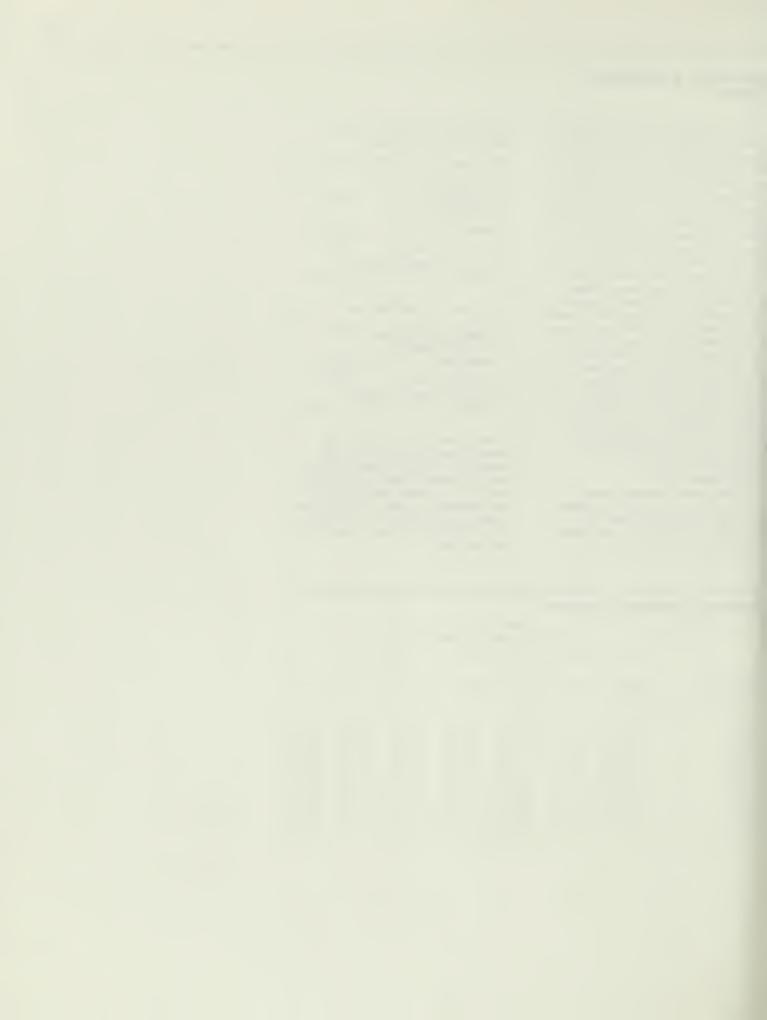
Percentage who said they played tennis 17%
Theoretical standard error 0.47%
Multiplied by observed design effect x 1.01
Observed standard error 0.47%

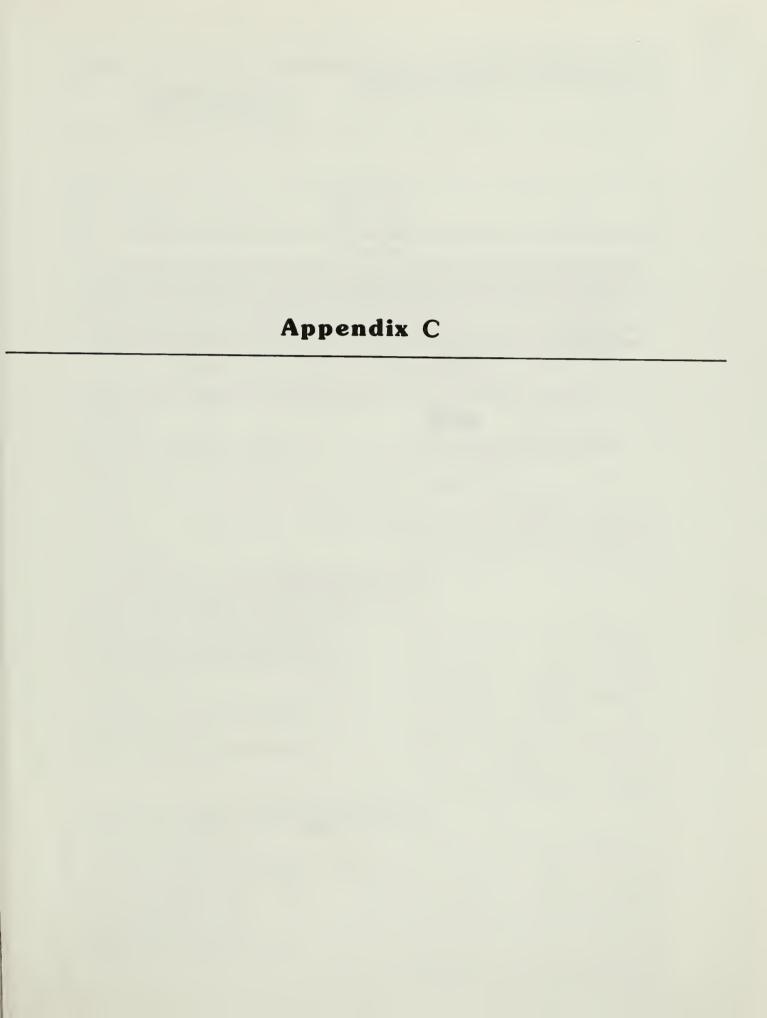
95-percent confidence interval =  $17\% \pm (1.96 \times 0.47)$  or 17% + 0.9%

Design effects based on smaller subsamples ranged from 0.79 to 1.19 and averaged 1.03 over all the instances tested. The Methodological Report contains instructions on how to derive design effects for other estimates—averages and totals as well as percentages—by using the 16 half sample codes recorded for each respondent on the NRS data tape.

Table B-1. Theoretical Standard Errors for Various Size Samples and Estimated Population Proportions

		Estim	ated popul	ation propor	rtion		
-	50	40	30	20	10	5	2.5
Sample size	percent						
5.757	0.0066	0.0065	0.0060	0.0053	0.0040	0.0029	0.0021
4,317	0.0077	0.0075	0.0070	0.0061	0.0046	0.0033	0.0024
2,878	0.0094	0.0092	0.0086	0.0075	0.0056	0.0041	0.0029
<b>2</b> ,158	0.0109 0.0132	0.0106 0.0130	0.0100 0.0122	0.0087 0.0106	0.0065 0.0080	0.0047 0.0058	0.0034 0.0042
720	0.0188	0.0184	0.0172	0.0150	0.0113	0.0082	0.0059
360	0.0267	0.0260	0.0245	0.0214	0.0160	0.0116	0.0082
100	0.0500	0.0490	0.0458	0.0400	0.0300	0.0216	0.0156







O.M.B. No. 0607-0413; Approvel Expires December 31, 1983

FORM NRS-1 U.S. DEPARTMENT OF COMMI	NSUS section 9).	All identifie	ort to the Census ble information wil	Bureau is confidential Il be used only by person	by lew (U.S. Code 13, s engaged in end for tha
NATIONWIDE RECREATION				sclosed or released to oth	HH. No.
SURVEY QUESTIONNAIRE  National Crime Survey Supplement	Sample	Contro	l number		HH. NO.
reacional Crime Survey Supplement		PSU	Segment	! cк !s	Seriel
A. Respondent		1.00	1		
Line No.   Age     Name			1	1 1	
			İ	1 1	
	10_		1		
B. Type of interview Type of i	non-interview	,			
•	CS - TYPE Z		7	☐ Other — Spec	ifv
	CS — Proxy	•	′	_ Other _ Speci	'' <u>'</u>
	efused NRS (	sunnlame	ent only)		
3   Telephone — no flashcard booklet 6   R	erasea mito t	suppleme			
➤ IF PERSONAL INTERVIEW — Now I have some questions at The Bureau of the Census is collecting this information for on the back of the information card booklet, NRS-100.) This explains that the survey is voluntary and all information pat random to participate in this survey and your enswers. These questions that I em going to ask you refer to just your ITELEPHONE INTERVIEW — Now I have some questions at The Bureau of the Census is collecting this information for	or the Netion expiains the l provided will will represen ourself and n about how your or the Netion	u spend ( ei Park ( egal aut be used t those ( ot to oth ou spend eel Perk (	Service. (Han hority for cor for stetistice of thousands ler members your free tin Service. You	d respondent Priva nducting this surv i purposes only. 'i of other people if of your household ne in outdoor recr were chosen at ra	cy Act Statement ey. it elso fou were chosen ke yourself. d. Now eation activities. andom to
perticipate in this survey and your answers will represent your household recently, I left an information card bookle					
INTERVIEWER — Does respondent have	Read remainde	r of intro	duction below	and continue with	form NRS-1
information card booklet? \ \ \ \ No - Go					id Now
These questions that i am going to ask you refer to just y		not to of		·	
1a. Are there any outdoor recreetion ectivities that you partienjoy doing?	cularly	C	IS HECK	there more than 1 a	scrivity listed in 1b
			EMA	☐ Yes	
002 1 Yes		7	~	☐ No — Skip	to 1d
2 □ No − Skip to introduction on page 2		<u> </u>	Of these so	tivities, which do	vou enlov
1b. What are the 3 most importent to you?		\\ \\ \'`	doing most		you enjoy
003 (1)		/			
004 (2)	/		008		
127	— <i>`</i> ′				
005 (3)			. □ !	No one favorite	
	<u> </u>				1
		^	CTIVITY (1)	ACTIVITY (2)	ACTIVITY (3)
► INTERVIEWER — Enter activities from 1b		→			
1d. Ask for each activity.		00	7 1 Yes	018 1 Yes	025 1 Yes
Do you go (activity) es often as you would like?		00	Z □ No	2 No	2 No
			2 140	20.10	2010
1e. Ask for each activity with "No" marked in Id. Turn to page 2 in Hara is a list of reesons why people don't do activities as off lika. Which, If eny, of these are reasons that kept you from ( often during the past 12 months? Any other ressons? Mark a	ten as they we activity) more				
(1) There are no places to do the activity around here.	PF-/-	00	8]+ 1□	017 * 1 🗆	026 * 1 🗆
(2) The places to do the activity are poorly maintained.		100			2 🗆
			2 🗆	2 🗆	
(3) The places to do the activity are too crowded.			3 🗆	3 🗆	3 🗆
(4) The places to do the activity have pollution problems.			4 🗆	4 🗆	4 🗆
(5) The places to do the activity have personal safety proble	ms.		5 🗆	5 🗆	5 🗆
(6) Not enough money.			6 🗆	6 🗆	6 🗆
(7) Not enough time.		00	B * 7 🗆	018 * 7	027 * 7 🗆
(8) Inadequate transportation or too far to travel.					8 🗆
			8 🗆	8	
(9) Inadequate information on places to do the activity.		-+	9 🗆	9 🗆	9 🗆
(10) Personal health reasons.		01		019 10	028 10 🗆
(11) Don't have the people to do the activity with.		01	1 11 🗆	020 11	029 11 🗆
(12) Some other reason — Specify,					
		01	2 12 🗆	021 12	030 12 🗆
			12 🗌	12	12 🗌
			12 🗆	12	12 🗆
1f. Ask for all activities listed. Peopls anjoy outdoor recreation activities on some section activities. On page 3 of the bookist, there is a list of such reason these are reasons why you anjoy (activity)? Any other reasons?	s. Which, if sr	pply.			
(1) It's quiet and peaceful where I go.		01	3 * 1 🗆	022 * 1 🗆	031 * 1 🗆
(2) There aren't many people around.			2 🗆	2 🗆	2 🗆
(3) I have the special equipment for it. I like using the equipment	nent.		3□	3 🗆	3 🗆
(4) It gives me a chance to be with family or friends.			4 🗆	4 🗆	4 🗆
(5) To do something new or different.			5 🗆	5 🗆	5 🗆
(6) To enjoy nature and the outdoors.			6 🗆	8 🗆	6 🗆
(7) I like the people who do that activity.		01	4 * 7 🗆	023 * 7 🗆	032 * 7 🗆
(8) To get exercise or keep in shape.					
		<del></del>	8 🗆	6	8 🗆
(9) To get away from day-to-day living or problems.			6 🗆	6 🗆	6 🗆
(10) Some other reason — Specify			7 -		
*		01		024 10	033 10 🗆
			10 🗆	10 🗆	10 🗆
			10 🗆	10 🗆	10 🗆

INTRODUCTION — Look at pages 4 and 5 in the bookiet. This is a list of various outdoor recreation activities and s			6 in the bookie ths, on ABOUT did you go (activi	how many dif-
calandar. I'd like you to think about the outdoor racreatic activities you took part in whether it was on vacations, tr outings, or at any other times during the past 12 months,	on ips,	2d. How many o	of thasa days wa hs (name month(:	
from, 198, to of this year.		2a. At what aga	did you first go	(activity) <b>?</b>
ACTIVITY	CHART			
	2b.	2c.	2d.	2a.
2a. During the past 12 months, did you go (read each activity	lf .	Number of days in past 12 months		
in Group I in column 2a)?  Record ''Yes'' responses in 2b for each activity, then ask for	"Yes,"	A - 1-2 days	Number of days in	Age
next group. Ask for ALL groups and then go to Check Item B	mark (X)	<b>B</b> - 3-10 <b>C</b> - 11-25	past 3 months	
at the bottom of page 3.		D - More than 25		
ODOUR !	+	25		<del> </del>
GROUP I	043	044	045	048
Bicycling	01 🗆			
	047	048	049	050
Horsaback riding	02 🗆			
	051	052	053	054
Goifing	03 🗆			
	055	058	057	058
Play tannis outdoors	04 🗆			
	059	080	081	082
Participata in outdoor taam sports	05 🗆			
	083	D.O.	NOT	ASK
Any other outdoor game or sport	06 🗆			
GROUP II				
During the past 12 months, did you go —				
	084	085	088	087
Canoeing or kayaking	07		200	
	088	089	070	071
Salling	08 🗆	073	074	0.75
44 1	072	073	074	075
Motorboating	078			
	<u> </u>	DO	NOT	ABK
Watarskiing	10 🗆			
	077	ĐO	NOT	ASK
Any other boating or watercraft sport	11 🗆			
GROUP III	_			
During tha past 12 months, did you go —	078	079	080	081
		0,3	000	100.
Swimming in an outdoor pool	082	083	084	085
Any other outdoor swimming	13 🗆	087	088	089
		087	000	000
Fishing	14 🗆		000	1000
	090	091	092	093
Hunting	15 🔲			
GROUP IV				
During the past 12 months, did you go —	094	095	098	097
Backpacking	16 🗆			
	098	099	100	101
Camping in developed campgrounds	17 🗆			
	102	103	104	105
Camping in primitive campgrounds	16 🗆			
	108	107	108	109
Any other complete				

			6 in the booklet ths, on ABOUT I lid you go (activi	how many dif-
		2d. How many o	f these days we hs (name month(s	
		2e. At what age	did you first go (	(activity)?
ACTIVITY CHART	- Continue	ed		
2a. — Continued  During the pest 12 months, did you go (read each activity in Group V in column 2a)?	If 'Yes,' mark (X)	2c.  Number of days in past 12 months  A - 1 - 2 days B - 3 - 10 C - 11 - 25 D - More than 25	Number of days in past 3 months	Age
GROUP V	119	120	121	122
Day hiking	20	120	121)	122
Walking for pleesure	123 21 🗆	616	NOT	ASK
Running or jogging	22 🗆	DO	NOT	ASK
Birdwatching or other nature study activities	23 🗆	126	127	128
GROUP VI				
During the pest 12 months, did you go — On picnics	129 24 $\square$	DO	NOT	ASK
Driving for pleesure	25 🗆	80	NOT	ASK
Sightseeing	26 🗆	00	NOT	ASK
Driving motorized vehicles off improved roads (include motorcycles but not snowmobiles)	27 🗆	133	134	135
GROUP VII				
During the past 12 months, did you go — Ice skating	136	DO	NOT	ASK
Downhill skiing	29 🗆	138	139	140
Cross country skiing or ski touring	30	142	143	144
Snowmobiling	31 🗆	146	147	148
Sledding	32 🗆	DO	NOT	ASK
Any other outdoor winter activities	33 🗆	po	NOT	ASK
GROUP VIII				
During the pest 12 months, did you —	151	PO	NOT	ASK
Visit eny zoos, feirs, or amusement perks	34 🗆			
Attend eny outdoor sports events	35 🗆	DO	NOT	ASK
Attendany outdoor, concerts, plays, or other outdoor performences	36	DO	NOT	ASK
GROUP IX				
During the past 12 months, did you take part in eny other outdoor recreation ectivity (record up to four)? Any other?	1 <b>54</b>	155	156	157
	158	159	160	161
	162	163	164	165
	39 D	167	168	169
CHECK   Are there any entries in 2b?   Yes - Ask 2c, 2d, a   No - Skip to 2f	and 2e at top	of page 2 together	for each activity v	with "Yes" in 2b

2f. During the pest 2 yeers, that is since 198_, heve you stopp	ed doing eny outdoo	r recreetion ectivities	thet you used to do?
2 ☐ No — Skip to 2i  2g. Which activities heve you stopped doing? Any other ectiviti	ies?		
Code from 2b, if possible. Record up to the first three.			
180 (1)			
[181] (2)			
182 (3)			
2h. Ask for each activity in 2g.  Look at the card on page 2 in the bookiet.	ACTIVITY (1)	ACTIVITY (2)	ACTIVITY (3)
Why did you stop (activity) ?  Any other reeson? Mark all that apply.			
	183 *	188 *	193 *
(1) There ere no pleces to do the ectivity around here.	1 🗆	1 🗆	1 🗆
(2) The places to do the activity are poorly maintained.	2 🗆	2 🗆	2 🗆
(3) The places to do the ectivity are too crowded.	3 🗆	3 🗆	3 🗆
(4) The pieces to do the activity heve poliution problems.	4 🗆	4 🗆	4 🗆
(5) The piaces to do the activity heve personal safety problems.	5 🗆	5 🗆	5 🗆
(6) Not enough money.	6 🗆	6 🗆	6 🗆
(7) Not enough time.	7 🗆	7 🗆	7 🗆
(8) Inadequate transportetion or too fer to travel.	8 🗆	6 🗆	6 🗆
(9) Inedequate informetion on pleces to do the ectivity.	9 🗆	e 🗆	9 🗆
(10) Personal health reesons.	10 🗆	190	195
(10) 1 distribution for the contract of the co	188	191	198
(11) Don't heve people to do ectivity with.  (12) Some other reason(s) — Specify,	11 🗆	11 🗆	11 🗆
(12,00mb calci roaddate) opcomy	187	192	197
	12 🗆	12 🗆	12 🗆
	12 🗆	12 🗆	12 🗆
	12 🗆	12 🗆	12 🗆
2i. During the next two years, that is, between now and 198	, do you expect you m	ight stert doing any o	utdoor
2 ☐ No — Skip to Check Item Č			
2j. Which ectivities ere those? Any other ectivities? Record up to the first three. (Code from 2b if possible)			
199 (1)			
200 (2)			
201 (3)			
Is respondent 16 years old or older?  CHECK ITEM C  Yes — Go to Check Item D  No — Skip to 4a			

	3k. Was the place where you were (ectivity) IN a city or town,
CHECK Look at items 2e end 2b. Merk eech of the following which has a "Yes" entry in 2b.	Just outside a city or town, or away from cities and towns?  318 1
Code Activity	2 ☐ Just outside Go to 3r
07 □ 2b = 07 Cenoeing or kayaking	3 □ Away
14 2b = 14 Freshweter fishing, other than	3L is that a place you can get to by motor vehicle and where
trout or selmon	motor vehicles are allowed?
15 ☐ 2b = 15 Hunting, other then big game	319 1 Yes 2 No
16  2b = 16 or 20 Backpecking or hiking	2 □ NO 3 □ Don't know
17	
19 ☐ 2b = 19 Any other camping not in cempgrounds	Is code 27 merked in 3a?
27	ITEM E LITES - Skip to Sil
snowmobiles)	□No
30 2b = 30 Cross country skiing or ski touring	3m. Now, please think about the land around (plece from 3c)
31 □ 2b = 31 Snowmobiling	where you were (ectivity). We are interested in how developed that area is. While you were (ectivity) there,
Are there entries in Check Item D?	were you usually less than ½ mile, ½ mile to 3 miles, or
CHECK	more than 3 miles from the nearest road or trail open to motor vehicle use, including motorcycles?
No − Skip to 4e	
For first "Yes" entry ebove in Check Item D, ask —	320 1 Less than ½ mile
3a. During the past 12 months, from, 198, to	2 ☐ ½ mile to 3 miles Skip to 3o
of this year, did you go on any outings or	3 More than 3 miles
trips primarily to go (activity from Check Item D)?	4 ☐ Don't know
301 1 No - Enter code end activity	3n. Now, please think about the land around (place from 3c)
301 1 No — Enter code end activity	where you were (activity). We are interested in how developed that area is.
302	While you were driving motor vehicles off improved
Go to next pege for next activity in Check Item D.	roads, were you usually less than ½ mile, ½ mile to 3
If this is lest "Yes" ectivity, go to 4e.	miles, or more than 3 miles from the necrest improved road?
303 2 Yes — Enter code and ectivity) end esk 3b.	321 1 Less then ½ mile
2 1 163 - Enter code and activity faile ask 3b.	2 2 ½ mile to 3 miles
304	3 ☐ More then 3 miles
2h Hamman andrea andrea did anno andrea de de contra de	4 ☐ Don't know
3b. How many outlings or trips did you go on in the past 12 months to go (ectivity)?	3o. Turn to page 8 in the booklet. In the area around the
	plece where you were (activity), how noticeable or
Number of trips	prominent were menmade structures such es power lines, dems, reliroads, or buildings?
3c. What is the name of the mein place you went (ectivity) on your lest trip?	
your lest trip!	322 1 Not noticeable
	2 ☐ Herdly noticeable 3 ☐ Moderetely noticeable
3d. About how many miles is (plece from 3c) from your	4 🗆 Quite noticeable but not prominent
residence?	5 ☐ Extremely noticeable and prominent
Miles	3p. In the area eround the place where you were (ectivity),
3e. Look et the card on pege 7 in the bookiet. How did you	how noticeable or prominent were signs of other
get there? Any other wey? (Merk ell thet epply.)	ectivities such as logging, ferming, minas, querries, and gravei pits?
307 * 1 ☐ Car, truck, or van 308 * 7 ☐ Airplane	
2 ☐ Pick-up camper, cemper- van, motor home	323 1 Not noticeeble
a Dicycle	2 Herdly noticeable
trailer	3 ☐ Moderetely noticeeble 4 ☐ Quite noticeable but not prominent
4☐ Motorcycle, moped, etc. 310 11☐ Some other wey)	5 Extremely noticeable and prominent
s □ Train	
6 ☐ Bus	Look et 3m. Is entry 2 or 3?
3f. How meny other people went there with you?	ITEM G LITES
	□ No — Skip to 3r
Number of people	3q. About how meny other persons, besides those in your own perty, did you see or hear per day in the area around
3g. How long did it teka you to get there?	(plece from 3c) where you (ectivity)?
	324 1 🗆 Less then 3
Days	2 🗆 3 to 10
313 Hours, if less then 1 dey	3 ☐ 11 to 50
Tiodis, it less their ruley	4 □ 51 to 100
3h. Did you have to pay any antry fees, activity fees, rentals, or other charges to go (ectivity) at (piece from 3c)?	5 ☐ More then 100
314 1 Yes	3r. On this trip did you go to any other places?
2 □ No − Skip to 3i	325 1 ☐ Yes
. ,	2 ☐ No — Go to Check Item H
31. About how much money was that per person?	3s. About how meny miles did you traval during that entire
315 \$	trip?
	326Miles
3]. How long did you stay there?	
316 Deys	Are there eny more ectivities with "Yes" responses in Check Item D?
Deys	ITEM H
Hours, if less then 1 dey	□ No — Go to 4e

NOTES	3k. Wes the piece where you were (activity) IN a city or town,
	just outside e city or town, or ewey from cities end towns?
	2 ☐ Just outside Go to 3r
	3 Away
	3L is that a piece you can get to by motor vehicle and where
	motor vehicles ere ellowed?
	319 1 Yes
	2 □ No
	3 □ Don't know
	Is code 27 marked in 3a?
	CHECK Yes — Skip to 3n
	□No
	3m. Now, piesse think about the land around (place from 3c)
	where you were (activity). We ere interested in how
	developed that eree is. While you were (activity) there, were you usually less than ½ mile, ½ mile to 3 miles, or
	more then 3 miles from the necrest road or treil open to
	motor vehicle use, including motorcycles?
For paye "Yea" on the in Charle ham D. and	320 1 ☐ Less than ½ mile
For next "Yes" entry in Check Item D, say —	2 ☐ ½ mile to 3 miles
3e. Other then the outings or trips you told me ebout before, during the pest 12 months did you go on eny outings or	3 ☐ More than 3 miles Skip to 3o
trips primerly to go (activity from Check Item Di?	4 ☐ Don't know
G 301 1 No — Enter code and activity	2- Nov. do-ship day to the first of the firs
	3n. Now, pieese think ebout the lend eround (place from 3c) where you were (activity). We ere interested in how
4 302	developed that eree is.
	While you were driving motor vehicles off improved
Go to next page for next activity in Check Item D.  If this is last "Yes" activity, go to 4a.	roeds, were you usuelly less then ½ mile, ½ mile to 3 miles, or more then 3 miles from the negrest improved
in this is last 100 detrivity, go to 4d.	roed?
303 2 Yes — Enter code and activity, and ask 3b.	321 1 Less than ½ mile
	2 ☐ ½ mile to 3 miles
304	3 ☐ More than 3 miles
	4 □ Don't know
How meny outings or trips did you go on in the pest 12 months to go (activity)?	3o. Turn to page 8 in the booklet. In the area around the
	piece where you were (activity), how noticeebie or
Number of trips	prominent were menmede structures such es power iines, dems, reiiroeds, or buildings?
3c. Whet is the name of the main place you went (activity) on	
your lest trip?	322 1 Not noticeable
	2 Hardly noticeable
3d. About how meny miles is (place from 3c) from your	3 Moderately noticeable
residence?	4 Quite noticeable but not prominent
306 Miles	5 Extremely noticeable and prominent
3e. Look et the cerd on pege 7 in the bookiet. How did you	3p. in the eree eround the piece where you were (activity), how noticeable or prominent were signs of other
get there? Any other wey? (Mark all that apply.)	ectivities such es logging, ferming, mines, querries,
307 * 1 □ Car, truck, or van 308 * 7 □ Airplane	end grevei pits?
2 ☐ Pick-up camper, camper- 8 ☐ Ship or boat	323 1 Not noticeable
van, motor home 9 ☐ Bicycle	2 ☐ Hardly noticeable
3 Vehicle pulling camper 309 10 Walking	з 🗆 Moderately noticeable
trailer 310 11 Some other	4 🗆 Quite noticeable but not prominent
4 ☐ Motorcycle, moped, etc. way	5 🗆 Extremely noticeable and prominent
5 ☐ Train	Look at 3m. Is entry 2 or 3?
6 ☐ Bus	CHECK
3f. How many other people went there with you?	TEM G □ Yes □ No Skip to 3r
Number of people	3q. About how meny other persons, besides those in your own
Number of people	perty, did you see or heer per day in the eree eround
3g. How long did it take you to get there?	(place from 3c) where you (activity)?
242	324 1 ☐ Less than 3
Days	2 □ 3 to 10
Hours, if less than 1 day	3 ☐ 11 to 50
Trodis, irress trial i day	4 ☐ 51 to 100
3h. Did you have to pey any entry fees, activity fees, rentals, or other charges to go (activity) at (place from 3c)?	5 More than 100
314 1 Yes	3r.On this trip did you go to eny other pieces?
2 □ No — Skip to 3i	325 1 □ Yes
· · · · · · · · · · · · · · · · · · ·	2 □ No — Go to Check Item H
3i. About how much money wes thet per person?	3s. About how many miles did you travel during that entire
315 \$	trip?
	326Miles
3j. How long did you stey there?	
240	Are there any more activities with "Yes" responses in Check Item D?
316 Days	CHECK
317 Hours if less than 1 day	☐ Yes — Ask 3a for next activity with "Yes"

NOTES	3k. Was the place where you were (ectivity) iN a city or town, just outside a city or town, or away from cities and towns?
	318 1 lne city or town Go to 3r
	Just outside Go to 3r
	3 Away
	3t. Is that a place you can get to by motor vehicle end where
	motor vehicles are allowed?
	319 1 TYes
	2 🗆 N o
	3 □ Don't know
	Is code 27 merked in 3e?
	CHECK ☐ Yes — Skip to 3n
	□ No
	3m. Now, piecse think about the land eround (piece from 3c)
	where you were (ectivity). We ere Interested in how
	developed that area is. While you were (activity) there,
	were you usually less than ½ mile, ½ mile to 3 miles, or more than 3 miles from the nearest road or trell open to
	motor vehicle use, including motorcycles?
	320 1 Less then ½ mile
For next "Yes" entry in Check Item D, sey —	₂ ☐ ½ mile to 3 miles
3e. Other than the outings or trips you told me about before,	3 ☐ More then 3 miles Skip to 3o
during the past 12 months did you go on eny outings or trips primarily to go (activity from Check Item DR	4 ☐ Don't know
301 1 □ No — Enter code and ectivity,	
301 1 No — Enter code and ectivity	3n. Now, please think about the land around (plece from 3c) where you were (activity). We are interested in how
4 302	developed that area is.
	While you were driving motor vehicles off improved
Go to next pege for next activity in Check Item D.  If this is last "Yes" activity, go to 4a.	roads, were you usually less than ½ mile, ½ mile to 3 miles, or more than 3 miles from the nearest improved
it this is last it as activity, go to 4a.	road?
303 2 Yes — Enter code end ectivity, and esk 3b.	321 1 Less then ½ mile
The second of th	2 ☐ ½ mile to 3 miles
304	3 ☐ More than 3 miles
	4 ☐ Don't know
How many outlings or trips did you go on in the past 12 months to go (ectivity)?	3o. Turn to page 8 in the booklet. In the area around the
	place where you were (activity), how noticeable or
Number of trips	prominent were manmade structures such es power
3c. Whet is the name of the main place you went (ectivity) on	lines, dems, reliroads, or buildings?
your lest trip?	322 1 Not noticeeble
	2 Herdly noticeeble
3d. About how meny miles is (piece from 3c) from your	3 Moderetely noticeable
residence?	4 Quite noticeeble but not prominent
306 Miles	ь □ Extremely noticeeble end prominent
IVIII03	3p. In the eree eround the piece where you were (ectivity), how noticeable or prominent were signs of other
3e. Look at the cerd on page 7 in the booklet. How did you get there? Any other way? (Merk all that apply.)	ectivities such es logging, farming, mines, querries,
307 * 1 ☐ Cer, truck, or ven 308 * 7 ☐ Airplene	end grevel pits?
2 ☐ Pick-up cemper, cemper-	323 1 Not noticeeble
ven, motor home 9 ☐ Bicycle	2 Herdly noticeeble
3 Vehicle pulling cemper 309 10 Welking	з 🗆 Moderetely noticeeble
Trailer 310 11 Some other	4 🗆 Quite noticeeble but not prominent
Motorcycle, moped, etc. way,	в 🗆 Extremely noticeeble end prominent
5 □ Frain	Look et 3m. Is entry 2 or 37
6 Bus	CHECK
3f. How many other people went there with you?	No − Skip to 3r
311 Number of people	3q. About how many other persons, besides those in your own
I valider of people	party, did you see or hear per dey in the erea around
3g. How long dld it take you to get there?	(plece from 3c) where you (ectivity)?
212	324 1 Less then 3
Deys	2 □ 3 to 10
Hours, if less then 1 dey	3 □ 11 to 50
	4 □ 51 to 100
3h. Did you have to pay any entry fees, activity fees, rentals, or other charges to go (ectivity) at (place from 3c)?	5 ☐ More then 100
314 1 □ Yes	3r. On this trip did you go to any other places?
2 □ No − Skip to 3j	325 1 Tyes
	₂ □ No Go to Check Item H
31. About how much money was that per person?	3s. About how many miles did you trevel during that entire
316 \$	trip?
	326Miles
3j. How long did you stay thera?	
218	Are there eny more ectivities with "Yes" responses in Check Item D?
Days	TEM H ☐ Yes — Ask 3e for next ectivity with "Yes"
317 Hours if less than 1 day	No - Go to 4:

NOTES	3k. Was the place where you were (ectivity) IN a city or town, just outside a city or town, or away from cities and towns?
	318 1 In a city or town Go to 3r
	2 ☐ Just outside
	3 Away
	3L is that a place you can get to by motor vehicle and where motor vehicles are allowed?
	319 1 Yes
	2 No
	3 □ Don't know
	Is code 27 merked in 3e?
	CHECK Yes Skip to 3n
	No □ No
	3m. Now, please think about the land around (plece from 3c)
	where you were (ectivity). We are interested in how
	developed that area is. While you were (activity) there, were you usually less than ½ mile, ½ mile to 3 miles, or
	more than 3 miles from the nearest road or trail open to
	motor vehicle use, including motorcycles?
For next "Yes" entry in Check Item D, sey —	320 1 Less then ½ mile
3a. Other than the outings or trips you told me about before,	2 ☐ ½ mile to 3 miles Skip to 3o
during the past 12 months dld you go on any outlings or	3 More than 3 miles
trips primarily to go (ectivity from Check Item DI?	4 □ Don't know
G 301 1 □ No — Enter code end ectivity	3n. Now, please think about the land around (plece from 3c)
4 302	where you were (activity). We are interested in how developed that area is.
	While you were driving motor vehicles off improved
Go to NRS-1A for next ectivity in Check Item D. If this is last "Yes" ectivity, go to 4e.	roads, were you usually less than ½ mile, ½ mile to 3 miles, or more than 3 miles from the nearest improved
w and to took you country, go to 15	road?
303 2 Yes - Enter code end ectivity, end esk 3b.	321 1 Less than ½ mile
	2 🔲 ½ mile to 3 miles
304	3 ☐ More then 3 miles
How many outings or trips did you go on in the past	4 □ Don't know
12 months to go (activity)?	3o. Turn to page 8 in the booklet. In the area around the place where you were (ectivity), how noticeable or
Number of trips	prominent were manmade structures such as power
3c. What is the name of the main place you went (ectivity) on	lines, dams, railroads, or buildings?
your last trip?	322 1 Not noticeeble
	2 🗆 Herdly noticeable
	- At-to-self-self-self-self-self-self-self-self
3d. About how many miles is (plece from 3c) from your	3 Moderetely noticeable
3d. About how many miles is (plece from 3c) from your residence?	4 🗆 Quite noticeeble but not prominent
	4  Quite noticeeble but not prominent 5  Extremely noticeeble and prominent
residence?  306 Miles  3e. Look at the card on page 7 in the booklet. How did you	4  Quite noticeeble but not prominent 5  Extremely noticeeble and prominent  3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other
7 residence?  306 Miles  3e. Look at the card on page 7 in the booklet. How did you get there? Any other way? (Mark ell thet epply.)	4  Quite noticeeble but not prominent 5  Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity),
residence?  306 Miles  3e. Look at the card on page 7 in the booklet. How did you get there? Any other way? (Mark ell thet epply.)  307 * 1 □ Car, truck, or van 308 * 7 □ Airplene	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent  3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activities such as logging, farming, mines, quarries, and graval pits?
residence?  306 Miles  3e. Look at the card on page 7 in the booklet. How did you get there? Any other way? (Mark ell thet epply.)  307 * 1 \[ \text{Car, truck, or van} \]  2 \[ \text{Pick-up camper, camper-} \]  8 \[ \text{Ship or boet} \]	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble
residence?  306 Miles  3e. Look at the card on page 7 in the booklet. How did you get there? Any other way? (Mark ell thet epply.)  307 * 1	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent  3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activities such as logging, farming, mines, quarries, and graval pits?
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activities such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activities such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activities such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  CHECK ITEM G No Skip to 3r  3q. About how many other persons, besides those in your own
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  CHECK ITEM G  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  CHECK ITEM G No Skip to 3r  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (piece from 3c) where you (activity)?
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  CHECK ITEM G  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around
residence?  306Miles  3e. Look at the card on page 7 in the booklet. How did you get there? Any other way? (Mark ell thet epply.)  307 * 1	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  CHECK ITEM G  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (plece from 3c) where you (activity)?  324 1 Less than 3
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent  3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  Yes No.— Skip to 3r  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (plece from 3c) where you (activity)?  324 1 Less than 3 2 3 to 10 3 11 to 50 4 51 to 100
residence?  306Miles  3e. Look at the card on page 7 in the booklet. How did you get there? Any other way? (Mark ell thet epply.)  307 * 1	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  Yes No Skip to 3r  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (plece from 3c) where you (activity)?  324 1 Less than 3 2 3 to 10 3 11 to 50
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residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  CHECK ITEM G  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (plece from 3c) where you (activity)?  324 1 Less than 3 2 3 to 10 3 11 to 50 4 51 to 100 5 More than 100  3r. On this trip did you go to any other places? 325 1 Yes 2 No — Go to Check Item H
residence?  306Miles  3e. Look at the card on page 7 in the booklet. How did you get there? Any other way? (Mark ell thet epply.)  307 * 1	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent 3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3? Yes No.— Skip to 3r  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (plece from 3c) where you (activity)?  324 1 Less than 3 2 3 to 10 3 11 to 50 4 51 to 100 5 More than 100  3r. On this trip did you go to any other places? 325 1 Yes 2 No.— Go to Check Item H  3s. About how many miles did you travel during that entire
residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent  3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activities such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent  Look at 3m. Is entry 2 or 3?  Yes No - Skip to 3r  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (plece from 3c) where you (activity)?  324 1 Less than 3 2 3 to 10 3 11 to 50 4 51 to 100 5 More than 100  3r. On this trip did you go to any other places?  325 1 Yes 2 No - Go to Check Item H  3s. About how many miles did you travel during that entire trip?
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residence?  306	4 Quite noticeeble but not prominent 5 Extremely noticeeble and prominent  3p. In the area around the place where you were (ectivity), how noticeable or prominent were signs of other activitias such as logging, farming, mines, quarries, and graval pits?  323 1 Not noticeeble 2 Herdly noticeeble 3 Moderetely noticeeble 4 Quite noticeable but not prominent 5 Extremely noticeeble and prominent Look at 3m. Is entry 2 or 3?  Yes No — Skip to 3r  3q. About how many other persons, besides those in your own party, did you see or hear per day in the area around (plece from 3c) where you (activity)?  324 1 Less than 3 2 3 to 10 3 11 to 50 4 51 to 100 5 More than 100  3r. On this trip did you go to any other places? 325 1 Yes 2 No — Go to Check Item H  3s. About how many miles did you travel during that entire trip?  Miles

4a. Now, I would like you to think about the relative	5a.Turn to page 9 in the booklet. Here is a list, by region, of
importance TO YOU of various types of parks and	the country's national parks. Can you recall ever going to
outdoor recreation areas.	any of these national parks?
First, would you say that	346 1 ☐ Yes
Having a yard or play area to use for outdoor recreation	2 □ No - Skip to 5d
is very important, somewhat important, or not very	
Important?	5b. Which national parks have you gone to?
g 336 1 Very important	Interviewer — Refer to page 10 in the booklet, enter code for each response.
Somewhat important	Any others?
□ 3 □ Not very important	
4b. Having parks or outdoor recreation areas within a	347
15-minute walk from home is very important, somewhat important, or not very important?	
	349 350
337 1 ☐ Very important	348
2 Somewhat important	351 352
3 Not very important	351 352
4c. Having parks or outdoor recreation areas that are farther than a 15-minute walk, but within an hour's travel time	
from home is very important, somewhat important, or not	353 354
very important?	
338 1 Very important	356 356
2 Somewhat important	If more than 20, how many mora?
3 ☐ Not very important	
4d. Having parks or outdoor recreation areas even farther	367
away, more than an hour's travei, maybe saveral hours' or even days' travel, is very important, somewhat important,	5c. In what year did you last visit one of these national parks?
or not very important?	
339 1 Very important	368 1 9
2 Somewhat important	5d. How likely are you to visit one of the national parks in
3 ☐ Not very important	the next 12 months; very likely, somawhat likaly, or
4e. Now iet's talk about the different places where you	not very likely?
engage in outdoor recreation.	359 1 Very likely — Skip to Check Item I
Does your residence have a yard or play area that you	2 🗆 Somewhat likely
can use for outdoor recreation?	3 ☐ Not very likely
340 1 Yes	4 Don't know
2 ☐ No — Skip to 4g	5e. How likely are you to visit one of the national parks in
4f. During the past 12 months, from1, 198, to	the next 3 years?
of this year, on how many different days did you use this yard or play area for outdoor recreation?	360 1 Very likely
Read answer categories.	2 Somewhat likely
341 1 Never	3 ☐ Not very likely 4 ☐ Don't know Skip to Check Item J
2 1 to 2 days	4 □ Don't know ∫ Skip to Check item's
3 ☐ 3 to 10 days	Is respondent 16 years old or older?
4 ☐ More than 10 days	CHECK ITEM I
	□ No END INTERVIEW
4g. Are there parks or outdoor recreation areas within a 15-minute walk from your residence?	5f. Many national parks charge entry fees. Additional fees ara
[342] 1 ☐ Yes	charged for the use of certain facilities and sarvicas inside
2 No - Skip to 4i	the parks. Thinking now about any amount from 25 cants to 100 dollars, what is the highest entry fee that you would
	pay par adult to visit any national park in the next 3 years?
4h. During the past 12 months (from 1, 198, to of this year), on how many different days	
did you go to parks or outdoor recreation areas within a	361 \$
15-minute walk?	x □ Don't know
Read answer categories.	5g. Now please think about a yearly pass which would admit
343 1 Nevar	you to all national parks as oftan as you wanted to go during the year. Thinking about any amount from 5 dollars
2 🗆 1 to 2 days	to 100 dollars, how much would you be willing to pay for
3 🗆 3 to 10 days	such a pass in the next 3 years?
4 More than 10 days	
41. During the past 12 months, on about how many different	362 \$ .
days did you go to parks or outdoor recreation areas that	363 1 Not interested
wara more than a 15-minute walk, but within an hour's travel from home?	2 Don't know
Read answer categories.	Is respondent 16 years old or older?
344 1 Naver	CHECK   Yes - Ask 5h
2 1 to 2 days	□ No END INTÉRVIEW
3 □ 3 to 10 days	Eh Look at the good on page 10 in the hacklet. Assume that to
4 ☐ More than 10 days	5h. Look at the card on page 10 in the booklet. Assume that to operate a national park costs an average of 5 dollers for each
	visitor. Thinking now about each INDIVIDUAL visitor, how
4j. During the past 12 months, on about how many different days did you visit any parks or outdoor recreation areas	much of the 5-dollar cost do you think should be paid directly by that visitor through entry and other fees, and how much
that were more than an hour's traval from home?	should be paid by the general public from tex revenue?
Read answer categories.	364 1 All (\$5.00) from park visitor — nothing from taxes
345 1 Never	2 🔲 ¾ (\$3.75) from park visitor — the rest from taxes
2 🗆 1 to 2 days	3 1/2 (\$2.50) from park visitor — the rest from taxes
3 🗆 3 to 10 days	4 4 (\$1.25) from park visitor — the rest from taxes 5 Nothing from park visitor — all (\$5.00) from taxes
4 ☐ Mora than 10 days	s ☐ Don't know

	I. The netional parks offer e variety of services. A list of		Mark (X) appropriate box					
such services is on page 11 in your booklet. As I read the list, please tell me whether the costs of each should be pald for by visitors or from taxes.	Visitor	Taxes	Combi-	Don't	DK/NA			
	fees (a)	(b)	nation (c)	provide (d)	(e)			
	perating camparounds 374			_				
(1) Op	perating campgrounds	1 🗆	2 🗆	3 🗆	4 🗆	5 🗆		
(2) Sp	pecial talks and exhibits 376	1 🗆	2 🗆	з 🗆	4 🗆	5 🗀		
	perating advance reservation systems for mping and other activities 376	1 🗆	2 🗆	з 🗆	4 🗆	5 🗆		
	des on buses or other ways of getting	. 1	2 🗍	. [	4 🖺			
	ound the park  future, visits to certain netional parks, such as Yallov	<u> </u>		on may have		5 🗆		
which	e crowding during the summer. Look et the cerd on po h could each reduce the overcrowding by the same am choice, second choice, third choice, end fourth choice	ount. Please t						
378	(e) Turning people away who come after a limit	of people are in	n the park.					
379	(b) Letting people apply in advance to reserve the	heir park visits,	then drawing	names to find	out who gets i	eservation		
380	(c) Letting people reserve park visits ahead of ti	me with reserv	ations taken o	n a first-come	, first-serve ba	sis.		
381	(d) Charging an extra 5 dollars per adult visitor	during the sum	mer in crowde	d parks.				
382	o (e) None acceptable							
	re interested in the time you spend on outdoor recrea- Compared to 2 years ago, that is 198_, would you	CHECK	Is more than	1 box marke	d in 6f?			
80y y	ou ere spending more time, less time, or about the amount of your time on outdoor recreetion?	ITEM K		Yes - Ask 6				
383	-	6a. On which	ch one of thes	No — Skip to		money?		
	2 🗀 Less time	og.o will		o did you op		, .		
	3 ☐ About the same 4 ☐ Don't know  Skip to 6c	391	Item	number				
	4 Don't know		× No one iter					
Why	is that?	l						
200			he card on paguagh idea of he					
384			oor recreation					
		392	o ☐ None — Si	kip to Check It	em L			
			Under \$50					
			2 □ \$50-\$99					
. Thini	king ahead 2 yeers, thet is to 198, would you	1 :	3 □ \$100-\$2	49				
	ou will be spending more time, less time, or ebout ame amount of time on outdoor recreation?		4 🔲 \$250—\$4					
385	1 More time		s □ \$500−\$9					
300	2 Less time	•	s = \$1000 and	d over — Abou	ut how			
	3 About the same							
	Skip to 6e	393	\$	. 00				
d Why		61. Compar	red to 2 years	ego, that is 1	98_, would	you say		
	is thet?	you are	spending a si	naller percer	tage, e iargei	percen-		
386		you are tage, or		maller percer me percentes	tage, e iargei	percen-		
		you are tage, or on outd	spending a si ebout the sai	maller percer me percentes n?	tage, e iargei	percen-		
		you are tage, or on outd	spending a si ebout the sai oor recreetion	maller percer me percenter n? rcentage	tage, e iargei	percen-		
		you are tage, or on outd	spending a si ebout the sai oor recreetion Smaller per Larger pero	maller percer me percenter n? rcentage centage same \ Ski	tage, e iargei	percen-		
386	re also interested in the money you spend on	you are tage, or on outd	spending a si ebout the sai oor recreetion Smaller per Larger per	maller percer me percenter n? rcentage centage same \ Ski	itage, e largei ge of the mon	percen-		
386	re also interested in the money you spend on poor recreation. Did you spend any money in the	you are tage, or on outd	spending a si ebout the sai oor recreetio  Smaller per Charger per About the	maller percer me percenter n? rcentage centage same \ Ski	itage, e largei ge of the mon	percen-		
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386	re also interested in the money you spend on cor recreation. Did you spend any money in the 12 months on outdoor recreation?	you are tage, or on outd	spending a si ebout the sai oor recreetio  Smaller per Charger per About the	maller percer me percenter n? rcentage centage same \ Ski	itage, e largei ge of the mon	percen-		
386  We a outdopest  387	re also interested in the money you spend on por recreation. Did you spend any money in the 12 months on outdoor recreation?  1  Yes 2  No — Skip to Check Item L	you are tage, or on outd	spending a si ebout the sai oor recreetio  Smaller per Charger per About the	maller percer me percenter n? rcentage centage same \ Ski	itage, e largei ge of the mon	percen-		
386  We a outdopest  387	re also interested in the money you spend on cor recreation. Did you spend any money in the 12 months on outdoor recreation?	you are tage, or on outd	spending a si ebout the sai oor recreetio  Smaller per Charger per About the	maller percer me percenter n? rcentage centage same \ Ski	itage, e largei ge of the mon	percen-		
386  We an outdo pest 387  Look you s	re also interested in the money you spend on por recreation. Did you spend any money in the 12 months on outdoor recreation?  1  Yes 2  No — Skip to Check Item L  at page 13 in the booklet. On which of these did	you are tage, or on outd	spending a si ebout the sai oor recreetio  Smaller per Charger per About the	maller percer me percenter n? rcentage centage same \ Ski	itage, e largei ge of the mon	percen-		
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386  We an outdo pest 387  Look you s	re also interested in the money you spend on cor recreation. Did you spend any money in the 12 months on outdoor recreation?  1 Yes 2 No - Skip to Check Item L  at page 13 in the booklet. On which of these did pend money for outdoor recreation? Any others?  1 Fees for entering and using outdoor recreation areas and facilities, including membership fees.  2 Boats, snowmobiles, aircraft, bicycles, and recreation vehicles including campers, etc.	6k. Thinking be spendabout the	spending a si ebout the say oor recreation in Smaller per call Larger per call About the Larger per call Don't know that?	rs, that is to	tage, e larger pe of the mone p to 6k	ou proba		
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386  a. We a outdo pest 387  f. Look you s	re also interested in the money you spend on cor recreation. Did you spend any money in the 12 months on outdoor recreation?  1 Yes 2 No — Skip to Check Item L  at page 13 in the booklet. On which of these did pend money for outdoor recreation? Any others?  * 1 Fees for entering and using outdoor recreation areas and facilities, including membership fees. 2 Boats, snowmobiles, aircraft, bicycles, and recreation vehicles including campers, etc. 3 Sporting goods, including balls, golf clubs,	6k. Thinking be spendabout the door rec	spending a si ebout the si oor recreation  Smaller per Ghout the si Don't know that?  ghead 2 yea ding a smaller same percece creation?	maller percer me percentes n? rcentage centage same N Ski	tage, e larger pe of the mone p to 6k	ou proba		
386  We an outdo pest 387  Look you s	re also interested in the money you spend on poor recreation. Did you spend any money in the 12 months on outdoor recreation?  1  Yes 2  No — Skip to Check Item L  at page 13 in the booklet. On which of these did pend money for outdoor recreation? Any others?  * 1 Fees for entering and using outdoor recreation areas and facilities, including membership fees. 2 Boats, snowmobiles, aircraft, bicycles, and recreation vehicles including campers, etc. 3 Sporting goods, including balls, golf clubs, fishing tackle, etc.	6j. Why is t	spending a si ebout the si oor recreation  Smaller per Ghout the Don't know that?  ghead 2 yea ding a smalle es same perce creation?	maller percer me percentes n? rcentage centage same Ski  rs, that is to r percentage intage of the rcentage	tage, e largei e of the mon- p to 6k	ou proba entage,		
386  B. We a outdo pest  387  Look you s	re also interested in the money you spend on poor recreation. Did you spend any money in the 12 months on outdoor recreation?  1  Yes 2  No — Skip to Check Item L  at page 13 in the booklet. On which of these did pend money for outdoor recreation? Any others?  * 1 Fees for entering and using outdoor recreation areas and facilities, including membership fees. 2 Boats, snowmobiles, aircraft, bicycles, and recreation vehicles including campers, etc. 3 Sporting goods, including balls, golf clubs, fishing tackle, etc. 4 Camping equipment	6j. Why is t	spending a si ebout the si oor recreation  Smaller per GMADOUT the CMADOUT the	maller percer me percentes n? rcentage centage same  Ski  rs, that is to r percentage intage of the rcentage centage same  Ski	tage, e larger pe of the mone p to 6k	ou proba entage,		
386  e. We a outdopest 387  f. Look you s 388	re also interested in the money you spend on cor recreation. Did you spend any money in the 12 months on outdoor recreation?  1 Yes 2 No — Skip to Check Item L  at page 13 in the booklet. On which of these did spend money for outdoor recreation? Any others?  1 Fees for entering and using outdoor recreation areas and facilities, including membership fees.  2 Boats, snowmobiles, aircraft, bicycles, and recreation vehicles including campers, etc.  3 Sporting goods, including balls, golf clubs, fishing tackle, etc.  4 Camping equipment  5 Clothing for outdoor recreation  6 Other equipment and supplies  7 Maintenance and repair of outdoor recreation	6j. Why is to some shout the spenia shout the door rec	g ahead 2 year ding a smaller per careation?  g ahead 2 year ding a smaller per careation?  a Smaller per careation?  b Smaller per careation?  c Larger per careation?	maller percer me percentes n? rcentage centage same  Ski  rs, that is to r percentage intage of the rcentage centage same  Ski	tage, e largei e of the mon- p to 6k	ou proba entage,		
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Is respondent 60 years old or older	7	7f. Are you currently teaching (this/any of these) skill(s) to others?				
CHECK ITEM L  Yes — Ask 78		[420] 1 ☐ Yes				
□ No — END INTERVIEW	100	420 1 1 1 1 1 1 5 5				
7a. During the past 12 months from of this year, have you taken poutdoor recreetion activities which were s	, 198, to pert in eny sponsored by a	2 □ No − Skip to 7h				
club or organization?		7g. Now, ebout the kinds of people you teach (this/these) skill(s), are they femily or reletives, friends or ecqueintences, organization members, or other				
2 □No − Skip to 7d	-3	people?				
7b. What ere the names of these organization:		Mark all that apply.				
PROBE: Cen you think of eny other clubs of which sponsored outdoor recreet which you took pert during the pe	ion activities in	421 *1 ☐ Family or relatives				
List up to four organizations below; then ask	ntioned)?	2 ☐ Friends or acquaintances 3 ☐ Organization members				
below; then ask Whet about (se	(7c) Membership	4 ☐ Other people — Specify				
108	409					
	1 □ Yes					
(1)	411 1 □Yes	7h. There ere meny reasons why people don't teech others the outdoor recreation skills or interests they heve. Turn to pege i5 in your bookiet. Here is a list of some of these reasons. Please tell me which of these reasons might				
(2)	2 □No	epply to you.				
	1 □ Yes 2 □ No	Any other reesons?  Mark all that apply.				
(3)	416	422 ≯1 ☐ Not enough time				
(4)	1 □ Yes 2 □ No	2 ☐ Not interested in teaching				
7d. Some people ere experienced et outdoor recreation ectivities which they could help others to learn. Do you		3 ☑ Don't know how to teach or wouldn't feel comfortable teaching				
have ANY outdoor recreetion skill or inter- think you could help others to learn or pra- including femily end friends?		4 □ Personal health reasons				
[416] 1 □ Yes		5 ☐ Lack of transportation				
2 □NO — END INTERVIEW		6 ☐ Don't have equipment or supplies				
7e. Whet is thet skill or interest?						
PROBE: Are there any other outdoor skills interests that you could help other learn?		423 *7 ☐ Haven't been asked to teach  8 ☐ Don't know the right people or				
(1)		organizations to get in touch with				
		9 □ Other reasons — Specify				
410						
(3)		END INTERVIEW				
NOTES						



## **READER COMMENT SHEET**

#### Dear Reader:

The National Park Service is interested in your comments and suggestions regarding this report. If you would like to comment, please remove this evaluation page and fold it so that the National Park Service mailing address appears on the outside. After folding, use tape or staples to close. No postage is required.

Place a checkmark (>) under the answer you select.	HOW USEFUL?		HOW I	иисн в	ETAIL?	
			Too Not			
	Very useful	what useful	Not useful	much detail	About right	enough detail
Participation rates—activity breakdown						
Participation rates—demographic breakdown						
Volume of participation (activity-days)						
Favorite activities			<del></del>			
Constraints and reasons for liking favorites						
Short-term trend indicators—activity						
Short-term trend indicators—time and						
money spent for outdoor recreation						
Use and importance of close vs far opportunities						
Past and future national park visits						
Respondent opinion on national park issues						
Outdoor recreation and aging			—			
3. Regarding the presentation of information, was it understandable an needed? Which parts of the report, if any, were difficult to understant the presentation be improved?						
4. Can you suggest any additional information that may be suitable for Nationwide Recreation Surveys?	r inclusio	n in futu	re			
5. Any other comments or suggestions? Use additional paper, if necess	sary.					
6. (This part is optional).  Name						
Organization Teleph	one num	ber				

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